

SECURITY FOR BUYERS OF ESSENTIAL OILS.

Stevenson & Howell's

"RED BALL" BRAND

ESSENTIAL OILS.

WE again direct the attention of all consumers of Essential Oils to the importance of the guarantee given in our Price List, as follows :—

PURE ESSENTIAL OILS.

All Oils grouped under this heading are guaranteed to be absolutely pure, and are under the direct analytical control of Mr. E. J. PARRY, B.Sc., F.I.C., F.C.S. (Author of "The Chemistry of Essential Oils and Artificial Perfumes"), Thanet House, 56a Great Dover Street, London, S.E. Buyers are at liberty to send samples from our deliveries of any of these Oils to Mr. PARRY for analysis at our expense, and in case of dispute his analysis is to be binding on buyers and ourselves.

It is obvious that some sort of guarantee for buyers is necessary in view of the fact that Essential Oils are subjected to every conceivable form of adulteration, the sole object of which is to secure to the vendors an extra profit at the expense of the buyer. Highly-trained chemists now obtain remunerative employment at some Essential Oil Distilleries with a view to discovering chemical compounds which can be used as adulterants of Essential Oils. These adulterants cheapen the Oils, but do not interfere with the *usual* tests for purity, and therefore cannot easily be detected.

We shall be glad to give particulars of the adulterations we have recently met with to anyone interested, also to submit samples of any of our Pure Essential Oils for approval.

STEVENSON & HOWELL, Ltd.

Southwark Street, London.

KUTNOW'S POWDER

ON THE P.A.T.A.

PRESCRIBED BY LEADING PHYSICIANS

**WIDELY
ADVERTISED**

**IMMENSE
SALE**

**STOCKED
BY ALL
MEDICINE
HOUSES**



**ALL
CHEMISTS
SHOULD
KEEP IT**

PRESCRIBED BY LEADING PHYSICIANS

Write for Particulars to the Sole Proprietors:

S. KUTNOW & CO., LTD.,
41 FARRINGTON ROAD, LONDON, E.C.

re "GALVANIT"

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It is a curious reflection on the wide difference in the enterprise of individual members of the Trade that there are still some leading Traders who have not yet shown foresight in meeting the Public demand that has arisen for GALVANIT, following the Press references to the introduction of GALVANIT at the Royal Society of Arts.

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Large and strong-selling advertisements that will drive the Public to every Chemist's in the country will continue to appear in every London daily and important weekly newspaper.

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"Armour" Pepsins
are high-grade, non-
hygroscopic, perfectly
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objectionable odour
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OFFICIAL REQUIREMENTS
IN
EVERY PARTICULAR.

Supplied in 2500, 3000, and 5000 Tests.

ARMOUR & COMPANY, Ltd.,
ATLANTIC HOUSE, HOLBORN VIADUCT, LONDON, E.C.

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Crown Chemical Works, Ltd.
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(See also SODA FOUNTAINS)

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(See also ESSENCES, SOL.)

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Boehringer, C. H., Sohn
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Madoery, H.
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Nichols Chemical Co., Ltd.
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Macfarlan, J. F., & Co.
Smith, T. & H., Ltd.
Zimmermann, C., & Co.
(See also CHLOROFORM)

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ANTIMONY AND ITS SALTS

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BISMUTH SALTS

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BISMUTH SALTS

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BISMUTH SALTS

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BOOKS AND MAGAZINES

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BOOKS AND MAGAZINES

Martindale's "Extra Phar."

BOOKS AND MAGAZINES

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BOTANIC DRUGGISTS

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BOTTLES

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BOTTLES

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BOTTLES

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May, Roberts & Co., Ltd.
Mysantal Co.

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CACHOUS

Meggison & Co., Ltd.

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Carmichael, F. J., & Co.

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Chemist's Co-operative Wholesale
Howards & Sons, Ltd.
May & Baker, Ltd.

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Calvert, F. C., & Co.
Chemist's Co-operative Wholesale
Hoffmann-La Roche, Ltd.
Hollingshurst & Co.
(See also DISINFECTANTS)

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Toogood, Wm., Ltd.

CARTONS

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Harrison & Waide
Thompson Bros.
Timme, W. O., & Co.

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CAUSTIC SODA

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Brunner, Mond & Co., Ltd.
Burroughs Wellcome & Co.
Evans Sons Lescher & Webb
Hoffmann-La Roche, Ltd.
Howards & Sons, Ltd.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
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Morson, T., & Son
Reitmeyer & Co.
Schimmel & Co.
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Sthamer, Dr. Richard
Sturge, John & E.
Tyrer, T., & Co., Ltd.
Washington Chemical Co.
White, A., & Sons

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National Cash Register Co., Ltd.

CASTOR OIL

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Carmichael, F. J., & Co.
Fuerst Bros.
Hull Oil Mfg. Co., Ltd.

CEMENTES

Kalk Bros., Ltd.

CHALK, PRECIPITATED

Levermore, A., & Co.
Mumford, G. S., & Sons
Nichols Chemical Co., Ltd.
Sturge, John & E.

CHEMISTS, MFG.

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Allen, Stafford, & Sons, Ltd.
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Barnett & Foster
Bayer Co., Ltd.
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Blackie, R.
Boulton, J., & Co.
Brady & Martin, Ltd.
British Drug Houses, Ltd.
Burroughs Wellcome & Co.
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Wand Mfg. Co.
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(See also WHOLESALERS)

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Conoid Co.
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Solport Bros.

CHLORIDE OF LIME

Brunner, Mond & Co., Ltd.

CHLOROFORM

Duncan, Flockhart & Co.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Morson, T., & Son
Smith, T. & H., Ltd.

CIGARS AND CIGARETTES

Hovenden, R., & Sons, Ltd.
Singleton & Cole, Ltd.

CITRIC ACID AND CITRATES

British Drug Houses, Ltd.
Howards & Sons, Ltd.
Morson, T., & Son
Sturge, John & E.

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Burge, Warren & Ridgley, Ltd.
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Maw, S., Son & Sons
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Perken, Son, & Co., Ltd.
Zeal, G. H.

CLOTH BALLS

O'Neill, Zetts & Co.

COCOA

Cadbury Bros., Ltd.
Frame Food Co.

COAL TAR SPECIALITIES

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Barnett & Co.
Parke, Davis & Co.

COLLAPSIBLE TUBES

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Brooks, Peel & Co.

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Albretheon, A., & Co.
Allen & Hanburys, Ltd.
Alliance Drug & Chem. Co.
Baiss Bros. & Stevenson, Ltd.
British Drug Houses, Ltd.
Devold, Peder
Evans Sons Lescher & Webb, Ltd.
Goodall, Backhouse & Co.
Lloyd, T. Howard, & Co.
Oldfield, Pattinson & Co.
Southall Bros. & Barclay, Ltd.
Woolley, Jas., Sons & Co., Ltd.
Wright, Layman & Umney, Ltd.
Zimmermann, A. & M.

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Hovenden, R., & Sons, Ltd.
Kent, G. B. & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.

COLOURS, BEVERAGE, &c.

Stevenson & Howell, Ltd.
(See also DAIRY ADJUNCTS)

CONDENSERS

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Bennett, Sons & Shears, Ltd.

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Ontem Corn Remedy Co.

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Ayrton, Saunders & Co.
Mitchell, N. W., & Sons, Ltd.

COUNTER ADJUNCTS

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Ford, Shapland & Co.

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British Drug Houses, Ltd.
Hewlett, C. J., & Son
Lloyd, T. H., & Co., Ltd.
Newbery, F., & Sons, Ltd.
Southall Bros. & Barclay, Ltd.

CREAM OF TARTAR

British Drug Houses, Ltd.

CREOSOTE

Baiss Bros. & Stevenson, Ltd.
Burt, Boulton & Haywood

CREPE BANDAGE

Gimber, W., & Son
Norwich Crepe Co. (1856), Ltd.
Wood, Vincent

CYANIDES

May & Baker, Ltd.

DAIRY SPECIALITIES

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Oldfield, Pattinson & Co.

DENTAL MECHANICS

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Fentiman, A. G.
Fentiman, A. J., & Co.
Halder, E. C.
Wardale & Co.

DENTIFRICES

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Beiersdorf, P., & Co.
Bell, John, Hills & Lucas, Ltd.
Blackie, R.
Burroughs Wellcome & Co.
Calvert, F. C., & Co.
Christy, T., & Co.
Cook, E., & Co., Ltd.
Encryl, Ltd.
Hall & Ruckel
"Irex" tooth-powder
Jewsbury & Brown
Lambert Pharmacal Co.
McKesson & Robbins
Martindale, W.
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Rowland, A., & Sons
Standard Tablet & Pill Co.
Woods, W., & Son
Woolley, J., Sons & Co., Ltd.

DEVELOPERS

Express Developing Co.

DISINFECTANTS

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Burt, Boulton & Haywood, Ltd.
Calvert, F. C., & Co.
Coudy & Mitchell, Ltd.
Cook, E., & Co., Ltd.
Dalmas, A. de St., & Co.
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Jeyes' Sanitary Compounds, Ltd.
Kay Bros., Ltd.
Lambert Pharmacal Co.
Sanitas Co., Ltd.
Tomlinson & Hayward, Ltd.
Willows, Francis B. & T.
Wright, Layman & Umney, Ltd.
Zimmermann, C., & Co.

DEXTRINE

Fink, F., & Co.

DOSE REGULATORS

Maw, S., Son & Sons
Reuter, B. J.

DIABETIC BREAD AND FOOD

Callard & Co.
Van Abbott, G., & Sons

DIGESTIVE PRODUCTS

Armour & Co., Ltd.
Benger's Food, Ltd.

Fairchild Bros. & Foster
Parke, Davis & Co.
Squire & Sons
Zimmermann, C., & Co.

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Ayrton, Saunders & Co., Ltd.
Barclay & Sons, Ltd.
Berliner, Arthur
Burge, Warren & Ridgley
Bush, H. W., & Co., Ltd.
Chemist's Co-operative Wholesale
Christy, T., & Co.
Edwards, W., & Son
Evans Sons Lescher & Webb, Ltd.
Hewlett, C. J., & Sons
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Pothe, H., & Co.
Quelch, H. C., & Co.
Reuter, R. J.
Saunders' Schutze, F., & Co.
Shirley Bros., Ltd.
Solport Bros.
Southall Bros. & Barclay, Ltd.
Tidman & Son, Ltd.
Toogood, W., Ltd.
Viascoe Co., Ltd.
Wattenbach, O.
Wood, Vincent
Woolley, J., Sons & Co.

DRUGS, CRUDE

Baiss Bros. & Stevenson, Ltd.
Carmichael, F. J., & Co.
Gathergood's Exor.
Hornor & Sons
Hymans, H., & Co.
Morrison, R., & Co.
Potter & Clarke, Ltd.
Ransom, W., & Son
Salle, H., & Co.

DRYSALTERIES

Harker, Stag & Morgan, Ltd.

DYES

Judson, D., & Son
Whitaker & Co. (Hat)

EAR MOPS.

Cooper, R. H., & Co.

EAU DE COLOGNE

Farina, J. M.
Farina, J. M. (No. 4)
Fickus, Conterens & Co.
McCracken, J. & R.
Schutze, F., & Co.

EDUCATIONAL INSTITUTIONS

Bath and West of England College of Pharmacy
Borough Polytechnic
British Optical Institute
Edinburgh Central School of Pharmacy
Glasgow School of Pharmacy
Leeds College of Pharmacy
Liverpool School of Pharmacy
London College of Pharmacy
Manchester College of Pharmacy
Mater's (So. Lond.) School of Pharmacy
North of England School of Pharmacy
Northern College of Pharmacy
Nottingham School of Pharm.
Pharmaceutical Society's School of Pharmacy
South of England College of Pharmacy

EFFERVESCENT PREPS.

Allen & Hanburys, Ltd.
Bishop, Alfred, Ltd.
Blackie, R.
Bristol-Myers Co.
Cox, A. H., & Co., Ltd.
Evans Sons Lescher & Webb, Ltd.
Goodall, Backhouse & Co.
Howards & Sons, Ltd.
Kutnow, S., & Co., Ltd.
Lorimer & Co., Ltd.
Newball & Mason
Potter & Clarke
Standard Tablet & Pill Co.
Sturge, John & E.
Tyrer, T., & Co., Ltd.
Wright, Layman & Umney

EMERY AND CLOTH

Oakley, J., & Sons, Ltd.

ENTOMOLOG. APPARATUS

Watkins & Doncaster

EPSOM SALTS

Howards & Sons, Ltd.

EMULSIONS, COD - LIVER OIL, ETC.

Allen & Hanburys, Ltd.
Ayrton, Saunders & Co., Ltd.
Baiss Bros. & Stevenson, Ltd.
Blackie, Robert
British Drug Houses, Ltd.
Faulding, F. H., & Co.
Harker, Stagg & Morgan, Ltd.
Lorimer & Co., Ltd.
Oldfield, Pattinson & Co.
Parke, Davis & Co.
Scott & Bowne, Ltd.
Sontball Bros. & Barclay, Ltd.
Tolkien, C., & Co.
Woolley, Jas. Sons & Co.

ELASTIC HOSIERY

Ayrton, Saunders & Co., Ltd.
Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Haywood, J. H.
Maw, S., Son & Sons
Wood, Vincent

ELECTROPLATING

Galvanit Mnfng. Co.

ENEMAS

Bailey, W. H., & Son
Burge, Warren & Ridgley
Daviol Rubber Co.
Maw, S., Son & Sons
Toogood, W., Ltd.
Warne, W., & Co., Ltd.

ESSENCES, CONCRETE

Lautier Fils
Murray, O., & Co., Ltd.
Schmoller & Bompard

ESSENCES, SOL. AND FRUIT

Alliance Drug & Chem. Co.
Barnett & Foster
Bush, W. J., & Co., Ltd.
Evans Sons Lescher & Webb
Fuerst Bros.
Hay, Wm., Ltd.
Lautier Fils
London Essence Co.
Lorimer & Co., Ltd.
Meggeson & Co., Ltd.
Newball & Mason
Spencer, J., Son & Co.
Stevenson & Howell, Ltd.
Zimmermann, A. & M.

ETHERS

Baiss Bros. & Stevenson, Ltd.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.
White, A., & Sons

EUCALYPTUS OIL

Baiss Bros. & Stevenson, Ltd.
British Drug Houses, Ltd.
Hymans, H., & Co.

EXTRACT OF HERBS

Newball & Mason
Potter & Clarke

EXTRACTS (MEDICINAL)

Allen, Stafford, & Sons, Ltd.
Chemist's Co-operative Wholesale
Gathergood's Exor.
Hewlett, C. J., & Son
Parke, Davis & Co.
Ransom, W., & Son

(See also WHOLESALE DRUGGISTS)

FEEDING BOTTLES

Brefft, E., & Co., Ltd.
Evans Sons Lescher & Webb, Ltd.
Hovenden, R., & Sons, Ltd.
Kilner Bros., Ltd.
Maw, S., Son & Sons
Sangers
Solport Bros.
Sontball Bros. & Barclay, Ltd.

FILTERS (WATER)

Berkefeld Filter Co., Ltd.

FLYCATCHERS

Deansmere Manfg. Co.
Ford, Shapland & Co.
Frowein, C.
Kay Bros., Ltd.
Plöttner & Franke
Smith, J. H., & Co.
Tunbridge & Wright

FOODS, INFANTS'

Allen & Hanburys, Ltd.
Benger's Food, Ltd.
Frame Food Co., Ltd.
Lofthouse & Saltmer
Natural Food Co., Ltd.
Willows, Francis B. & T.

FRUIT CRYSTALS

Astrators, Ltd.

FLESH GLOVES

Sangers
Solport Bros.

FOODS, SPECIAL

Allen & Hanburys, Ltd.
Bayer Co., Ltd.
Benger's Food, Ltd.
Brand & Co., Ltd.
Brusson Jeune
Burt, C. J.
Buvo, Ltd.
Callard & Co.
Faurebld Bros. & Foster
Frame Food Co., Ltd.
Menley & James, Ltd.
Natural Food Co., Ltd.
Wander, A.

FRUIT SYRUPS

Idris & Co., Ltd.

FULLER'S EARTH

Mumford, G. S., & Sons

GELATIN AND GLUE

Boehm, F., Ltd.

GLASSWARE, CHEMICAL

Zakradnik, Jos.

GLAUBER'S SALT

Bramwell, E., & Son
Howards & Sons, Ltd.

GLYCERIN

Boehm, F., Ltd.

Fuerst Bros.

Price's Patent Candle Co.

GLYCERIN PLANT

Forshaw, E., & Son, Ltd.

GLYCEROPHOSPHATES

Pointet & Girard

GOLD PAINT

Judson, D., & Son

GOLDBEATER'S SKIN

Gutmann & Leslie Gates

GRINDERS

Allen, Stafford, & Sons, Ltd.
Goodall, Backhouse & Co.
Willows, Francis, B. & T.

GUMMED PAPER TAPE

Gosberon, John, & Co.

GUMS

Fink, F., & Co.

HAIR PREPARATIONS

Capanoids (1909), Ltd.
Obesebrough Manfg. Co.
Edwards' "Harlene" Co.
Egglossa Mnfng. Co.
Harker, Stagg & Morgan
Herpicide Co.

John Strange Winter

Robare's Anreoline

Rowland, A., & Sons

To-Kalon Mnfng. Co., Ltd.

HAT DYES

Whitaker & Co.

HEATING APPARATUS

Clark, S., & Co.

Reuter, R. J.

HERBS

Carmichael, F. J., & Co.
Potter & Clarke, Ltd.

HOMOEOPATHIC MEDICINES

Ashton & Parsons, Ltd.

Epps, James, & Co.

Keene & Ashwell, Ltd.

Leath & Ross

HOTELS

Esmond Hotel

Kingsley Hotel

Thackeray Hotel

HOT-WATER BOTTLES

Berliner, Arthur

Burge, Warren & Ridgley

Dunlop Rubber Co., Ltd.

Fnlham Pottery & Obeavin

Filter Co., Ltd.

Galen Mfg. Co., Ltd.

Hutchinson Co.

Maw, S., Son & Sons

May, Roberts & Co.

Newbery, F., & Sons, Ltd.

Sontball Bros. & Barclay

Tompkins, James, Ltd.

Wood, Vincent

HYDROGEN PEROXIDE

May & Baker, Ltd.

Sanitas Co., Ltd.

Tyrer, T., & Co., Ltd.

HYPOPHOSPHITES

May & Baker, Ltd.

Tyrer, T., & Co., Ltd.

INSECT POWDER

Boehm, F., Ltd.

Carmichael, F. J., & Co.

Smith, B. A., & Co.

IODINE AND IODI

Howards & Sons, Ltd.
Morsan, T., & Son

ITROSYL

Fletcher, Fletcher & Co.

INSECTICIDES

Acme Chemical Co., Ltd.
Christy, Thos., & Co.
Smith, B. A., & Co.
Tomlinson & Hayward, Ltd.

JARS AND POTS

Brefft, E., & Co., Ltd.
Bush, H. W., & Co., Ltd.
Christy, T., & Co.
Johnsen & Jorgensen, Ltd.

Kilner Bros., Ltd.

Lang, Jiles, & Son

Maw, S., Son & Sons

Potbs, H., & Co.

Renter, R. J.

Stipendnm Stopper Co.

Toogood, W., Ltd.

LACTIC FERMENTS

Allen & Hanburys, Ltd.

Cox, Arthur H., & Co., Ltd.

Davies, Sons & Co.

Lloyd, T. Howard, & Co.

Martindale, W.

Parke, Davis & Co.

Standard Tablet Co.

Wilcox, Jozeau & Co.

LAMPS, PARABOLIC

Bruce, F., & J.

LANOLINE

Bnrroughs Wellcome & Co.

Christy, T., & Co.

LARD

Chemist's Co-operative Wholesale

Ewen, J., & Sons

LIME JUICE AND CORDIAL

Evans Sons Lescher & Webb

Goodall, Backhouse & Co.

Idris & Co., Ltd.

LINSEED, CRUSHED, ETC.

Allen, Stafford, & Sons

Mnmford, G. S., & Sons

LINTS

Liverpool Lint Co.

May, Roberts & Co., Ltd.

Robinson & Sons, Ltd.

Vernon & Co., Ltd.

LIQUORICE JUICE

Boehm, F., Ltd.

British Drug Houses, Ltd.

Carmichael, F. J., & Co.

Evans, Gray & Hood

Fuerst Bros.

Evans Sons Lescher & Webb, Ltd.

Horner & Sons

Jackson, E. M.

Mnmford, G. S., & Sons

LIQUORS, CONC., ETC.

Allen, Stafford, & Sons, Ltd.

Fletcher, Fletcher & Co.

Hewlett, C. J., & Son

Robinson, B., & Co.

LITHIA SALTS

British Drug Houses, Ltd.

Fuerst Bros.

May & Baker, Ltd.

Merck, E.

LOOFAHS

International Sponge Importers

LOZENGES

Cox, A. H., & Co., Ltd.

Denoual, J., & Co.

Jackson, E. E.

Meggeson & Co., Ltd.

Potter & Clarke, Ltd.

Raines & Co.

Warrick Bros.

MACHINERY, PHARMACAL

Allen & Hanburys, Ltd.

Bennett, E., & Son, Ltd.

Bennett, Sons & Sbears, Ltd.

Braitwaite, H., & Co., Ltd.

Forshaw, E., & Son, Ltd.

Gardner, Wm., & Sons, Ltd.

Pindar, J. W., & Co.

Smith, B. A., & Co.

Stokes, F. J., Machine Co.

Thompson & Capper (Stokes)

Wilkinson, S. W., & Co.

MAGNESIA AND ITS SALTS

Henry, T. & W.

Howards & Sons, Ltd.

May & Baker, Ltd.

Parke, Davis & Co.

Washington Chemical Co.

MENTHOL CONES

Bush, H. W., & Co., Ltd.

Cubenow, Hugo, Ltd.

Maw, S., Son & Sons

MAILING CASES

Estes, E. B., & Sons

MALT EXTRACT AND PREPS

Allen & Hanburys, Ltd.
Blackie, R.
British DiaMalt Co.
Bnrroughs Wellcome & Co.
Evans Sons Lescher & Webb
Hewlett, C. J., & Son
Lorimer & Co., Ltd.
Montgomery & Co., Ltd.
Oppenheimer, Son & Co., Ltd.
Paine & Co., Ltd.
Sontball Bros. & Barclay, Ltd.
Woolley, Jas. Sons & Co., Ltd.
Wright, Layman & Umney

MARKING INK

Hickisson, A. (Bond's)

MEDICINE CHESTS

Burroughs Wellcome & Co.
Keene & Ashwell, Ltd.
Leath & Ross
Lloyd, T. Howard, & Co.
Parke, Davis & Co.

MEASUR-S

Bentson & Co.

Bush, H. W., & Co., Ltd.

MEAT EXTRACTS

Armour & Co., Ltd.

Brand & Co., Ltd.

MERCURIALS

Howards & Sons, Ltd.

May & Baker, Ltd.

Merck, E.

Tyrer, T., & Co., Ltd.

METEOROLOGICAL SETS

Darton, F., & Co.

METHYLATED SPIRIT

Bnrrough, J., Ltd.

Preston's Liverpool Distillery

Randall & Son, Ltd.

MINERAL WATERS AND SALTS

Apollinaris Co., Ltd.

British Drug Houses, Ltd.

Cbeltenham Municipality

Findlater & Co., Ltd.

Hughes, E. Griffiths

Ingram & Royle, Ltd.

Vichy (State Springs)

MIRRORS, TOILET

Sangers

MOTOR GOGGLES

Darton, F., & Co.

OILS, ESSENTIAL

Allen, Stafford, & Sons, Ltd.

Alliance Drug & Chem. Co.

Bnah, W. J., & Co., Ltd.

Chiris, Antoine

Dodge & Olcott Co.

Evans Sons Lescher & Webb, Ltd.

Fuerst Bros.

Horner & Sons

Jackson, J., & Co.

Lantier Fils

Lhermine & Cle

London Essence Co.

Macajone, Eugenio, & Co.

Morrison, R., & Co.

Mühlethaler, Th., Ltd.

Pasquale, S. F. de, & Fratelli

Poppelreuter, W.

Ransom, W., & Son

Scheller, Emil, & Co.

Schimmel & Co.

Schmoller & Bompard

Seymour, J.

Spencer, J., Son & Co.

Stevenson & Howell, Ltd.

Whittaker, Arthur

Wright, Layman & Umney

Zimmermann, A. & M.

OILS, FATTY, ETC.

Allen, Stafford, & Sons, Ltd.

Fuerst Bros.

Price's Patent Candle Co.

OTTO OF ROSE

Bontcheff & Kidoff
Reitmeyer & Co. (synthetic)
Orozoff, P., & Fils
Scheller, Emil & Co.
Seraphimoff, S., & Co.
Shinkoff & Co.

ORANGE WINE

Melrose-Drover Co., Ltd.

OXYGEN GENERATOR

Oppenheimer, Son & Co., Ltd.

OZONE GENERATOR

Reuter, R. J.

PALATINOLIDS

Oppenheimer, Son & Co.

PAPER TUBES

O'Neill, S., & Sons, Ltd.

PERFUMES

Allen & Hanbury's, Ltd.
Barclay & Sons, Ltd.
Barnett & Co.
Bronnley, H., & Co., Ltd.
Bush, W. J., & Co., Ltd.
Christy, T., & Co.
Chnit, Naef & Co.
Erasmio Co., Ltd.
Evans Sons Lescher & Webb, Ltd.
Hewlett, C. J., & Son
Hovenden, R., & Sons, Ltd.
John Strange Winter
Lescol Perfumery Co.
McCracken, J., & R.
Maw, S., Son & Sons
Morison, G. H., & Co., Ltd.
Newbery, F., & Sons, Ltd.
Quelch, H. C., & Co.
Sonthall Bros. & Barclay
Spencer, J., Son & Co.
To-Kalon Mfg. Co., Ltd.
Warrick Bros.
West, T., & Son

PASTILLES

Allen & Hanbury's, Ltd.
Asche, C. F., & Co.
Burrongs Wellcome & Co.
Denoual, J., & Co.
Epps, James, & Co.
Evans Sons Lescher & Webb
Meggeson & Co., Ltd.
Wander, A.
Warrick Bros.

PATENT AGENT

Barker, R. W.

PETROLEUM EMULSION

British Drug Houses, Ltd.

PETROLEUM JELLY

Carmichael, F. J., & Co.
Chesebrough Mfg. Co.
Schliemann's Oil & Ceresine Co.

PERFUME MATERIALS

Bontcheff & Kidoff
Bush, W. J., & Co., Ltd.
Chiris, Antoine
Compagnie Morana
Lantier Fils
Mühlethaler, Th., Ltd.
Murray, O., & Co., Ltd.
Scheller, Emil & Co.
Schimmel & Co.
Shipkoff & Co.
Spencer, J., Son & Co.
Zimmermann, C., & Co.

PESSARIES

Burge, Warren & Ridgley
Rendell, W. J.

PHOTO. CHEMICALS

Boehringer, C. F., & Soehne
Burrongs Wellcome & Co.
Merck, E.
Reitmeyer & Co.

PHOTO. ENLARGERS,

PRINTERS, &c.
Express Developing Co.
Halifax Photographic Co.

PHOTO. GOODS

Barclay & Sons, Ltd.
Darton, F., & Co.
Evans Sons Lescher & Webb, Ltd.
Halifax Photographic Co.
Ilford, Ltd.
Kent, G. B., & Sons, Ltd.
Lennon, Ltd.
May, Roberts & Co.
Newbery, F., & Sons, Ltd.
Reitmeyer & Co.

PILL BOXES

Evans Sons Lescher & Webb, Ltd.

PLASTERS

Allcock Mfg. Co.
Berliner, Arthur
Beiersdorf, P., & Co.
Dalmas, A. de St., & Co.
Leslies, Ltd.
Maw, S., Son & Sons
Solport Bros.

PILL COUNTERS

Bornkessel, F. G.

PILL MAKERS

Allen & Hanbury's, Ltd.
Asche, C. F., & Co.
Bishop, Alfred, Ltd.
British Drug Houses, Ltd.
Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Howards & Sons, Ltd.
Lloyd, T. Howard, & Co.
McKesson & Robbins
Parke, Davis & Co.
Standard Tablet & Pill Co.
Wand Mfg. Co.

POCKET SPITTOON

Sanitas Co., Ltd.

POLISHES (VARIOUS)

Bradley & Bourdas
Judson, Daniel, & Son
Oakey, J., & Son, Ltd.

PROPRIETARY ARTICLES

Anglo-American Drug Co.
Ashton & Parsons, Ltd.
Barclay & Sons, Ltd.
Bayer Co., Ltd.
Becham, T.
Beiersdorf, P., & Co.
Box, W. H.
British Drug Houses, Ltd.
Burgess, E.
Capsuloids (1909), Ltd.
Chameleon Oil Co., Ltd.
Christy, T., & Co.
Coleman & Co., Ltd.
Congreve, G. T.
Conoid Co.
Cox, A. H., & Co., Ltd.
Curry, Henry
Daggett & Ramsdell
Daisy, Ltd.
Danyez Virne, Ltd.
Da Silva & Co.
Davenport, J. T., Ltd.
Day & Sons (Crewe), Ltd.
Denonal, J., & Co.
Ecosolent Compounds, Ltd.
Edwards, W., & Son
Evans Sons Lescher & Webb, Ltd.
Faulding, F. H., & Co.
Fellows' Syrup
Fennings, Alfred
Ferris & Co.
Finford, C. E., Ltd.
Goodall, Backhouse & Co.
Gordon, Murray & Co., Ltd.
Guy's Tonic Co.
Harvey & Co. (Dublin), Ltd.
Henry, T. & W.
Hovenden, R., & Sons, Ltd.
Hughes, E. Griffiths
Ichthyol Co.
International Chemical Co.
Iron-Ox Rem. Co., Ltd.
Kay Bros., Ltd.
Kutnow, S., & Co., Ltd.
Lalor's, Dr., Phosphodyne
Lambert Pharmacol Co.
Lofthouse & Saltmer
Lorimer & Co., Ltd.
Martindale, W.
May, Roberts & Co.
Menley & James, Ltd.
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Owbridge, W. T., Ltd.
Pedexy Co.
Phillips, Chas H., Chem. Co.
Quinine Bitters Mfg. Co., Ltd.
Reitmeyer & Co.
Resinol Chemical Co.
Sangers'
Sartolin, Ltd.
Schimmel & Co.
Scott & Bowne, Ltd.
Squire & Sons
Standard Tablet & Pill Co.
Stedman's Teething Powders
Sterling Remedy Co.
Thompson & Capper
Tunbridge & Wright
Voss & Co.
Walker & Son
Wilcox, Joseau & Co.
Zimmermann, A. & M.
Zimmermann, C., & Co.
Zotos, Ltd.

(See also IDENTIFIERS and TOILET

ARTICLES)

POSTERS

Ford, Chapland & Co.

POULTRY POWDER

Coverdale Poultry Powder, Ltd.

PULVELLÆ

Warrick Bros.

PRINTERS

Christie, Malcolm & Co.
Dudley & Co.
Ford, Shaplan & Co.
Harrison & Waide
Parkes, John, & Co.
Smith, W. H., & Son
Townsend, J., & Sons

PULVERETTES

Oppenheimer, Son & Co., Ltd.

PUMPS

Berkefeld Filter Co., Ltd.

QUININE AND SALTS

Boehringer, C. F., & Soehne
Carmichael, F. J., & Co.
Howards & Sons, Ltd.
Poinet & Girard

RAPE OILS

Hull Oil Mfg. Co.

RAZORS

Auto-Strop Safety Razor Co.
Hovenden, R., & Sons, Ltd.
International Distributing Co.

RENNET

Fullwood, R. J., & Bland
Oldfield, Pattinson & Co.

RESINS AND RESINOIDS

Allen, S., & Sons, Ltd.
Allen & Hanbury's, Ltd.
Morson, T., & Son
Ransom, W., & Son
Smith, T. & H., Ltd.

RESPIRATORS

Zimmer & Co.

RUBBER GOODS

Burge, Warren & Ridgley, Ltd.
Daval Rubber Co.
Dunlop Rubber Co., Ltd.
Evans Sons Lescher & Webb, Ltd.
Galen Mfg. Co.
Hasting, Lang & Co., Ltd.
Haywood, J. H.
Hovenden, R., & Sons, Ltd.
Hutchinson Co.
Maw, S., Son & Sons
May, Roberts & Co.
Shirley Bros., Ltd.
Warne, W. & Co., Ltd.

RUBBER SPONGES

Wanklyn, H. A.

SACCHARIN

Saccharin Corporation, Ltd.

SALICIN

Macfarlan, J. F., & Co.
Smith, T. & H., Ltd.

SAMPLE CASES

Keane, Thomas

SANTONIN

Smith, B. A., & Co.

SAPONIN

Field, C. W.

Shamer, Dr. R.

SAUCES

Goodall, Backhouse & Co.

SCALE PREPARATIONS

Morson, T., & Son

SCALES, WEIGHING

Maw, S., Son & Sons
Parnall & Sons, Ltd.
Sonthall Bros. & Barclay, Ltd.

SEA SALT

Tidman & Son, Ltd.

SEA-SICKNESS REMEDY

Zotos, Ltd.

SEEDS

Conway, Wm., & Sons, Ltd.
Potter & Clarke, Ltd.

SELTZOGENES

Aerators, Ltd.

SERUMS AND ANTITOXINS

Allen & Hanbury's, Ltd.
American Animal Therapy Co.
Evans Sons Lescher & Webb, Ltd.
Parke, Davis & Co.
Schimmel & Co.
Wilcox, Joseau & Co.

SHARES

McAdam & Tuckniss

SHEEP-DIPS

Acme Chemical Co., Ltd.
Bart, Boulton & Hayward
Sanitas Co., Ltd.
Tomlinson & Hayward, Ltd.

SHOP-FITTING

Ayrton-Graham, Ltd.
Bowling & Son
Evans Sons Lescher & Webb, Ltd.
Josephs, Philip, & Sons, Ltd.
Maw, S., Son & Sons
Mills, H.
Parnall & Sons, Ltd.
Rudduck & Co.
Sangers'
Southall Bros. & Barclay, Ltd.

SODA FOUNTAINS

Consol Automatic Aerators, Ltd.

SOAP MATERIALS

Armour & Co., Ltd.
Chiris, Antoine

SOAPS

Allen & Hanbury's, Ltd.
Armour & Co., Ltd.
Bell (John), Hills & Lucas, Ltd.
Bronnley, H., & Co., Ltd.
Chesebrough Mfg. Co.
Cook, E., & Co., Ltd.
Erasmio Co., Ltd.
Evans Sons Lescher & Webb, Ltd.
Hull Oil Mfg. Co., Ltd.
International Distributing Co.
Lescol Perfumery Co.
Oakley, J., & Son, Ltd.
Pears, A. & F., Ltd.
Peat Products (Sphagnol), Ltd.
Price's Patent Candle Co.
Shaw, Henry, & Co.
Wright, Layman & Umney

SOAP PLANT

Forshaw, K. & Son, Ltd.

SOAPS, MEDICATED

Armour & Co., Ltd.
Bronnley, H., & Co., Ltd.
Calvert, F. O., & Co.
Lambert Pharmacol Co.
Resinol Chemical Co.
Wright, Layman & Umney

SODIUM BICARBONATE

Brunner, Mond & Co., Ltd.
Howards & Sons, Ltd.
Mumford, G. S.

SOOTHERS & FITTINGS

Hasting, Lang & Co., Ltd.
Shirley Bros., Ltd.

SOYA OIL

Hull Oil Mfg. Co.

SPARKLETS

Aerators, Ltd.

SPECTACLES

Botwright & Grey
Darton, F., & Co.
Maw, S., Son & Sons
Nitsohc & Günther
Raphael's, Ltd.

SPHYGMOMETERS

Hicks, J. J.

SPIRIT OF WINE

Burrongh, J., Ltd.
Preston's Liverpool Distillery

SPITTING-FLASKS

Maw, S., Son & Sons

SPONGE BAGS

Maw, S., Son & Sons
Schutze, F., & Co.
Toogood, W., Ltd.

SPONGES

Internl. Sponge Importers
Kent, G. B., & Sons, Ltd.
Maw, S., Son & Sons
Sangers'

SPONGIO-PILINE

Whitehead R. R., & Bros.

SPONGE SHOW STANDS

Wanklyn, H. A.

SPRAYS

Burge, Warren & Ridgley, Ltd.
Burt, Boulton & Hayward, Ltd.
Daval Rubber Co.
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
Parke, Davis & Co.
Renter, R. J.

SPRINKLER TOPS

Betts & Co., Ltd.
Brooks, Pell & Co.

STARCH

Mumford, G. S., & Sons

STILLS

Bennett, E., & Son, Ltd.
Bennett, Sons & Shears, Ltd.
Braithwaite, H., & Co., Ltd.

STOPPERS

Fletcher, Fletcher & Co.
Stipendum Stopper Co.

STOVES, TRAVELLING

Reuter, R. J.

SURGICAL APPLIANCES

Allen & Hanbury's, Ltd.
Bailey, W. H., & Son
Burrongs Wellcome & Co.
Haywood, J. H., Ltd.
Hutchinson Co.
Maw, S., Son & Sons
Quelch, H. C., & Co.
Wood, Vincent
Warne, W. & Co., Ltd.

SUPPOSITORIES

Cox, Arthur H., & Co.
Peat Products (Sphagnol), Ltd.

SURGICAL DRESSINGS

Beiersdorf, P., & Co.
Berliner, Arthur
Barronchs Wellcome & Co.
Bash, H. W., & Co., Ltd.
Dalmas, A. de St., & Co.
Galen Mfg. Co., Ltd.
Gimber, W., & Son
Haynes, G., & Co.
Leslies, Ltd.
Liverpool Lint Co.
Maofarian, J. F., & Co.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newsome, C.
Robinson & Sons, Ltd.
Southall Bros. & Barolay, Ltd.
Thermogene Co., Ltd.
Vernon & Co., Ltd.
Wood Vincent

SUSPENSORY BANDAGES

Bailey, W. H., & Son

SYNTHETIC PERFUMES

Boehringer, C. F., & Soehne
Bush, W. J., & Co., Ltd.
Chuit, Naef & Co.
Compagnie Morana
Fuerst Bros.
Murray, O., & Co., Ltd.
Reitmeyer & Co.

SYNTHETIC REMEDIES

Boehringer, C. F., & Soehne
Boehringer, C. H., Sohn
Hoffmann-La Roche, Ltd.
Reitmeyer & Co.
Wolfensberger, J. H., & Co.

SYPHONS,

Aerators, Ltd.
Barnett & Foster
Brefitt, E., & Co., Ltd.
Camwal, Ltd.
Idris & Co., Ltd.

TABLET MACHINERY

Thompson & Capper
Allen & Hanbury's, Ltd.

TABLOID PRODUCTS

Burroughs Wellcome & Co.

TARTARIC ACID

British Drug Houses, Ltd.
Boehringer, C. H., Sohn
Fuerst Bros.

TIN BOXMAKERS

Goodall, Backhouse & Co.
Huntley, Boorne & Stevens

TABLETS, COMPRESSED

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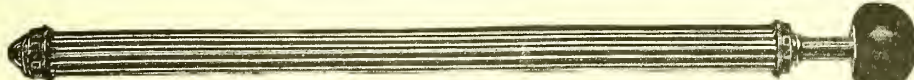
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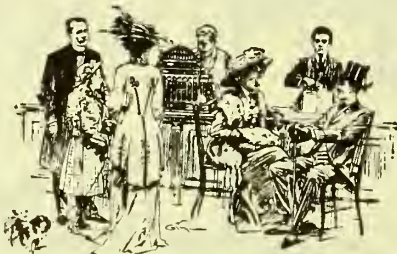
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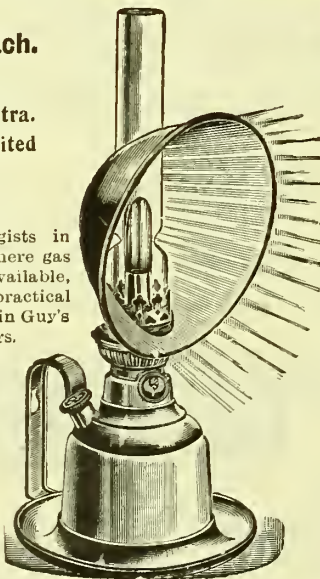
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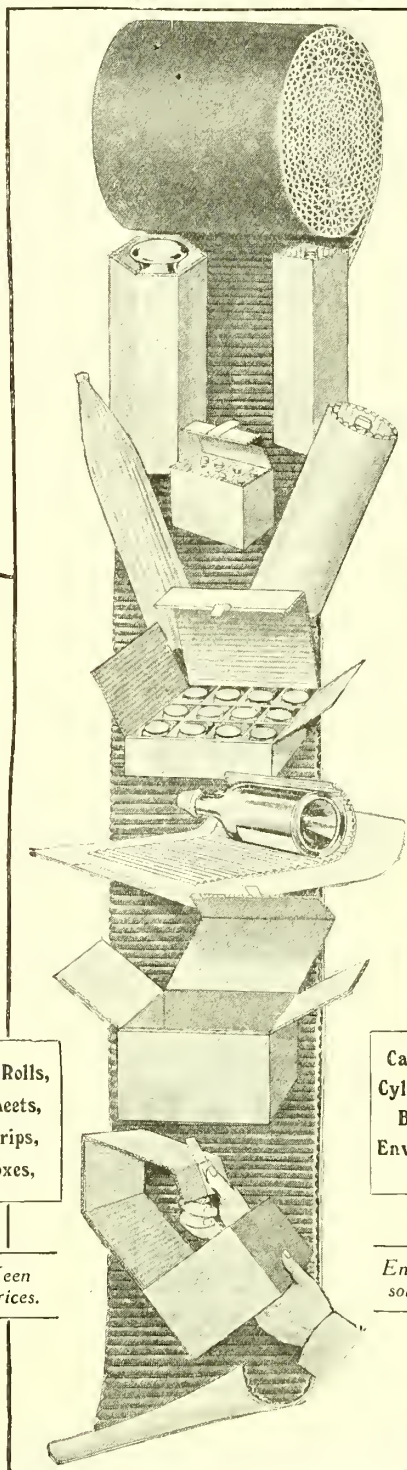
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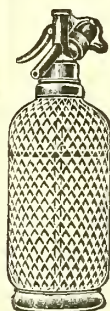
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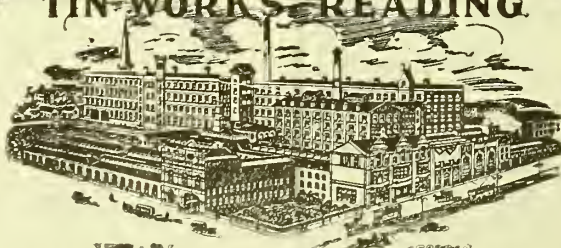
CARTONS, SKILLETS AND FOLDING BOXES
OF EVERY DESCRIPTION A SPECIALITY.

THOMPSON BROS., Duckett Works, Kendal.

HUNTLEY, BOORNE & STEVENS, LTD

TIN WORKS, READING.

**COLOR
PRINTERS
ON TIN.**

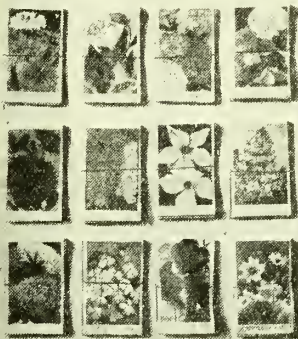


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DECORATED & PLAIN TIN BOXES
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Quotations to samples
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Choice FLOWER SEEDS

ONE PENNY PER PACKET.



No. 1 COLLECTION.

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| 15 Sweet Peas | 12 Shirley Poppy |
| 12 Mignonette | 6 Candytuft |
| 15 Virginia Stock | 6 Cornflower, Blue |
| 6 Chrysanthemums | 6 Nemophila |
| 6 Eschscholtzia | 6 Sunflower |
| 6 Lupins | 6 Aster, Victoria |
| 6 Wallflower | 6 Nasturtium, Tall |
| 12 Dwarf Nasturtiums | |

W. CONWAY & SONS, Ltd.

The C. & D.'s Seedsmen.

BULL GREEN, HALIFAX.

Estd. 1820.

Tel. No. 111.

PACKET SEEDS.

Try a
Sample
gross
(assorted as
per list) for

6/-.

Counter
Display
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*free with
opening order.*

*In view of the shortage
of Seeds this year,
Chemists will be well
advised to place their
orders early. The
demand will be far in
excess of the supply.*

"ACME WEED KILLERS"

Have now a large sale through CHEMISTS, and early applica-
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POWDER WEED KILLER

Packed in small decorated tins.
Immediately soluble in cold water.

All tins Free. No return Empties.
Specially adapted for Export.

LIQUID WEED KILLER.

Strength: 1 gall. sufficient for 25 galls. of water.

AND DOUBLE STRENGTH.

"ACME" POWDER SHEEP DIP.

Approved by Board of Agriculture and Fisheries for Sheep
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1s. 6d. Packet makes 40 Gallons.

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QUASSIA CHIPS.

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The
Gold
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Wine
Tonic



London.
1908.

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DO Stock it? It means quick **YOU**
YOU sales and a steady profit if **DO**

SEND FOR LIST.

All Registered Chemists can sell Wincarnis
with Quinine without a licence. Why not you?

Medical men in your district order it often,
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By Special Appointment to the King & Queen of Spain.

COLEMAN & CO., LTD., 21 Wincarnis Works, NORWICH.

Cheltenham Natural Aperient Water.

A natural Magnesia and Soda Sulphate Saline Water
bottled by the Municipality from one of its Springs.
AN ENGLISH WATER which as a saline aperient
is equal in strength to and unexcelled by any of the
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Prices, pamphlets, sample bottles, &c.
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Small size, 3 oz. bottle, in case.
Medium " 7 " " "
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**NEROLI M.
ROSE, ALPINE.
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Specialities of the Grasse Factory—

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GUARANTEED PURE. DISTILLED BY
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Wholesale Quantities only.

Pure Balsam Copaiba (Filtered, B.P.)
Redistilled Peppermint ("Prismentha" Brand)

ESSENTIAL OILS FOR SOAPMAKERS & CONFECTIONERS, PURE BALSAMS, AND TONKA BEANS.

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SPERMINUM is a purified organic product. For subcutaneous injections it is put up in Ampullae, each containing one dose. Its employment is indicated in cases of NERVOUS DEBILITY, NEURASTHENIA, LOCOMOTOR ATAXY, AND ALL OTHER ALLIED NERVOUS AFFECTIONS.

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Two Good Lines



POTTER & MOORE'S — Mitcham — Lavender Water

NEW STYLE POCKET FLASKS.

Retail 1/1. Wholesale 9/- doz.

BUISSON FRÈRES

(True to
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Carnation Perfume ::

12/-, 18/-, 24/-, & 48/- doz.



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W. J. BUSH & CO., LTD.

Ash Grove, HACKNEY, N.E.

And at NEW YORK, MOSCOW, MELBOURNE, SYDNEY & GRASSE.

YOU MAKE A PROFIT OF 1/- to 1/6 on every sale of Lavona de Composée or Flowers of Oxyzoin

Write for particulars of our unique local advertising scheme. It will bring you new business.

Our Specialities are:—

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Harriett Meta's Gold Medal Hair Tonic.
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Crème To-Kalon.
Crème Supérieure.
To-Kalon Talcum Powder.
To-Kalon Denta Crème.
To-Kalon Complexion Powder.
Sozo (The Great Deodorant).

Price Lists and Showcards gladly sent on application.

TO-KALON MANUFACTURING CO., Ltd., 143-145 Great Portland St., London, W.

N.B.—WE ARE ON THE P.A.T.A. LIST.

**TO USERS and DEALERS in METH. SPIRIT and SPIRIT OF WINE.
FOR QUOTATIONS apply to—**

PRESTON'S LIVERPOOL DISTILLERY CO., LD.

The Largest Makers in the Kingdom.

BANKHALL DISTILLERY, SANDHILLS, LIVERPOOL. Office: 4 India B'ngs, Water St., Liverpool.

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For the HAIR

is now being largely advertised in the Ladies' Magazines



SPECIAL OFFER.

During JANUARY and FEBRUARY we will send carriage paid to any part of the British Isles, on receipt of remittance for 8/-,

Per doz.

1 doz. boxes of ECCLOSSA SHAMPOO @ 8/-

Each box containing 7 2d. packets.

½ doz. 1/- ECCLOSSA HAIR TONIC ... @ 8/-

½ doz. 1/- ECCLOSSA BRILLIANTINE @ 8/-

These have a ready sale in many parts, and will realise 18/- for an outlay of 8/-

☛ Only one order at these prices can be supplied to any one shop.

THE EGGLOSSA MFG. CO.
GLOUCESTER ROAD, BRISTOL.

Fortune Awaits

the Chemist who Uses

CREMOGEN

*as a base for economically
— producing high-class —*

**NON-CREASY, NON-STICKY,
WINTER CREAMS & SKIN FOODS,**

Which nourish the epidermis and fortify it against the injurious effects of biting frost and cutting March winds.

A 2/6 tin of Cremogen will yield up to six or seven pounds of snow-white cream by the addition of 228 grains of borax and tap water as desired.

CREMOGEN is sent post free for 2/6 to any part of Great Britain by:—

F. NEWBERY & SONS, Ltd.

27, 28 CHARTERHOUSE SQ., LONDON, E.C.

Agents for the Manufacturers: The TROMMER CO., Ltd.

Without Question—The Best.

DUCHESS **2d. TOILETS.**

Regd.

Exquisitely Perfumed. For sale by Chemists only.SEVENTEEN DIFFERENT VARIETIES.**TRY A SAMPLE GROSS - - CARRIAGE PAID.**

Samples
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If you require an "OWN NAME" Soap, see our
samples and quotations before going elsewhere.
IT WILL PAY YOU.

Samples
free on
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The ERASMIC Co., Ltd., WARRINGTON.

"May Queen"
POWDERED TOILET SOAP.
DELICATELY PERFUMED.
Packed in Prettily Decorated Sprinklers.
Certified by D. A. B. Griffiths of London Public Analyst—
as the "VERY BEST TOILET SOAP" Antiseptic, Disinfectant & Hygienic.
 Write for Sample Tin to **HENRY SHAW & CO. DUKINFIELD.**

VANOLEUM**STRONGEST
VANILLA
OBTAINABLE.**

You are in business for gain—to get
more business and to get more profit
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Vanoleum will help you to **Increase your
Trade and the Ratio of your profit.**

It is the same old Popular Flavour in a new
form, one lb. of which makes 2 gallons of best
Vanilla Essence for 26/-.

**WHITTAKER, Newton Heath,
MANCHESTER.****WILL YOU TRY IT?**

½ oz. sample sent for 1/-, which is refunded with first order.

**ABSORBINE**
(YOUNG'S)

will reduce **Inflamed, Swollen Joints, Bruises, Soft
Bunches. Cure Bolls, Fistula or any unhealthy sore**
quickly; pleasant to use; **does not blister** under band-
ages or remove the hair, and you can work the horse, 8/3 per
bottle at dealers or delivered. **Horse Book 7D free.**

ABSORBINE JR., for human use, 4/6 per bottle. Reduces
Varicose Veins, Varicocele, Hydrocele, Goitre, Wens, Strains,
Bruises, stops pain and inflammation. Genuine only in
Lithographed Tin Bottles. Manufactured only by

W. F. YOUNG, P.D.F., Springfield Mass., U.S.A.

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farm and stock papers throughout the United Kingdom. Many
chemists carry the goods in stock. This is bound to create a constant
and ever-increasing demand for the remedy. Inquiries from your
section referred to you. If you have not already advised us that you
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will surely appear on our reference list.

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THOS. CHRISTY & CO., 4-12 Old Swan Lane, LONDON, E.C.

100% PROTECTED PROFIT.

Prices of Eucryl Tooth Powder to the Trade.

Sixpenny Tins.

OPENING ORDERS.

4 dozen sent as 3 dozen, at $\frac{3}{6}$ doz. net.

ALL REPEAT ORDERS.

$3\frac{1}{2}$ dozen sent as 3 dozen, at $\frac{3}{6}$ doz. net.

CARRIAGE PAID.

RETAIL PRICE, P.A.T.A. PROTECTED, 6d. face value.

Attractive Showcards, Sample Tins, Window Slips, &c., Free on Application.

EUCRYL TOOTH POWDER.

Supplies may be obtained from any of the Principal Wholesale Houses, or Direct from the Proprietors:

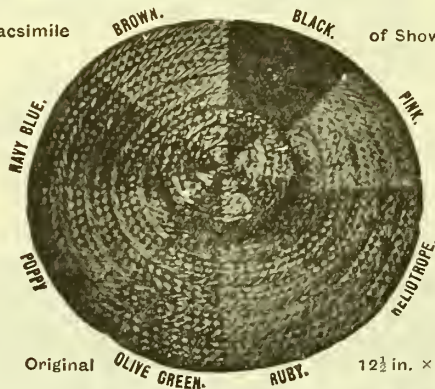
EUCRYL LIMITED, HULL.

A new Invention of Great Utility.

"LUTON" HAT DYES

No Gloss. No Polish. Dry at once. Resist rain.

Facsimile BROWN. BLACK. of Showcard.



In bottles, 6d. each, in separate neat cartons, with suitable brush

These Dyes are a distinct invention, dying the straw without an objectionable varnished appearance, and producing the effect of new goods.

Write for terms and patterns:

WHITAKER & CO.

COLOUR WORKS, KENDAL, ENC.

SPECIALISTS IN VARNISHES, STAINS, DYES, &c. ESTD. 1878.

Colonial Testimonial—"Your 'Lutons' have really come up to the mark."—Geo. H. Langton, Port of Spain, Trinidad.



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Another point in connection with

VISCOSE BOTTLE CAPS

is that they keep permanently clean and bright. They will not get stained or marked or dirty as will skins, and moreover if by chance anything should touch the surface it can be wiped off without in any way injuring the cap. And remember they are easily affixed by anyone in a second or two—no trouble at all. Booklet free.

VISCOSE DEVELOPMENT CO. LTD.

3 New Court, Carey Street, London, W.C.

FEET! FEET!! FEET!!!



A NEW FOOT TONIC. The **ONE AND ONLY** specific for **TENDER-TIRED-FOETID FEET.**
A deodorant liquid giving immediate results. A new and **ORIGINAL** preparation that sells at sight.
Retail Price 1/- per bottle. Liberal Terms. No Cutting. Agents Wanted.
KNIGHT & Co., Pharmaceutical Chemists, 20 Wheeler Gate, Nottingham.

BEETHAM'S *Reg^d* Larola

IS THE SKIN TONIC AND EMOLLIENT

FOR 1910

It is effective.

It is attractive.

It is price-protected.

It is well-advertised.

It sells readily.

It bears a good profit.

Booklets, Picture Post-Cards and Showcards sent free to help you sell it.

Have you our new Showcard?

What the "Chemist & Druggist" says of it :

BEETHAM'S NEW SHOWCARD.—One of the prettiest lithographic productions which have come to us lately is the Larola beauty here depicted. The card measures 24 in. by 18 in., and is all roses, even the word "Larola" being formed from prickly rose-stems. The fair rose-gatherer has rosy cheeks, and she and the setting make so bright a picture that no pharmacy will be complete without it. Copies can be obtained from Messrs. M. Beetham & Son, Cheltenham, the originators of Glycerine and-Cucumber and Larola.



This handsome Show Card, in 14 colours (size 24 × 17), can be had by any chemist who will give it a good place in his Pharmacy.

M. BEETHAM & SON,
CHELTENHAM.

YOU CANNOT KILL

INSECTS with cheap Foreign-Ground Adulterated Insect Powder.

THEY WILL NOT DIE

under such FALSE PRETENCES, but your Trade will be killed.

A LARGE MAJORITY

of the Wholesale Buyers purchase only our GENUINE DALMATIAN INSECT POWDER BECAUSE it is Ground in London from the Genuine INSECT FLOWERS and WARRANTED ABSOLUTELY PURE.

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14 Water Lane,
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CHAMELEON OIL

"NO NEED
TO RUB!"

FOR HUMAN USE

Advertised Prices 1/1½ & 2/9 per bottle

Wholesale Prices 10/- & 24/- per dozen

FOR VETERINARY USE

2/- & 4/3 per bottle

17/- & 35/- per dozen

THE CHAMELEON OIL Co. Ltd. 4, ALBANY COURT YARD, LONDON W.

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TO THE WHOLESALE TRADE ONLY.

"PEACH KERNEL OIL"

(OLEUM AMYGD. PERSIC.)

Guaranteed Genuine.

Parry's Analysis.

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CRUDE DRUG MERCHANTS—IMPORT AND EXPORT.

PRICES ISSUED WEEKLY.

Original Packages can generally be supplied at the Current Prices quoted in the Trade Report of this paper on Terms as below.

- *Acet. Ipecac. B.P., 7 lbs. @ 1/3 lb.
 " Scilla, B.P., 7 lbs. @ 3d. lb.
 Acid Acoylo-Salicyl., 56 lbs. @ 1/11 lb.; 7 lbs. @ 2/1 lb.; 1 lb. @ 2/3 lb.
Acid Carbol Xtl., 39/40; 56 lbs. @ 5d. lb.; 10-lb. Tins @ 5/- each; Detached Cryst. 8/- each; 86-lb. Bots. 8d. lb., Single Bots. 11d. lb.; Detached Cryst. 1 lb. @ 1/1 lb.; Crude Black, 45 Gall. Casks @ 10d. gall.; 1 Gall. Tins @ 1/5 each.
 " Citric Cryst., B.P. '85, 1 cwt. @ 1/4; 7 lbs. in Bags @ 1/5 lb.; powder 1/4 lb. extra.
 " Diethylbarbituric, 18 oz. @ 3/4 lb.; 1 oz. @ 2/8 oz.
 " Oxalic Cryst., 5 cwt. @ 3 3/4 lb.; 1 cwt. @ 3 3/4 lb.; 14 lbs. @ 3 3/4 lb.
 " Salicyl. pulv., 7 lbs. @ 1/1 lb.; phys. pure, 1 lb. @ 3/- lb.
 " Sulph. Aromat., B.P., 5 lbs. @ 3/8 lb.
 " Tart., cryst. or pulv., B.P. 1885, 1 cwt. @ 9d. lb.; 7 lbs. @ 10 1/2 lb.; parv. 1/4 lb. extra.
 Adeps Lanae B.P., Anhydrous, 2 cwt. @ 52/8 cwt., Hydrous @ 49/- cwt.; 1 cwt. @ 2/- cwt., 28 lbs. @ 5/- cwt., 14 lbs. @ 8/- cwt., 7 lbs. @ 13/- cwt. extra.
Ammon. Brom., P.B., 1 cwt. @ 1/1 1/2 lb.; 7 lbs. @ 1/3 lb.
 Amyli Pulv., 10 cwt. @ 12/3 cwt.; 2 1/2 cwt. @ 12/9 cwt.; 1 cwt. @ 14/6 cwt.
 Aniseed, English ground, 1 cwt. @ 33/6 cwt.; 7 lbs. @ 5d. lb.
Camphor, English Flowers, "not artificial," 5 lbs. @ 1/10 lb.; 3 oz. 7 lbs. @ 1/11 lb.; 1/2 oz., 1 lb. @ 2 3/4 lb. Crude, 140 lbs. @ 1/4 lb.; 28 lb. @ 1/5 lb.
 " Liq. Ammon. Aromat., 5 lbs. @ 9d. lb.
 " Bismuth, P.B., 6 lbs. @ 10 1/2 lb.
 " Copaiba Bucha et Cuneb., 5 lbs. @ 2/8 lb.; 1 lb. @ 2/10 lb.
 " Easton., p.s. 1-3, B.P., 1 lb. @ 3/- lb.
 " Ferri Iod. p.s. 1-7, 1 lb. @ 5/9 lb.
 " Ferri Perchlor. Fort. P.B., 7 lbs. @ 4d. lb.
 " Ferri Phosph. Co. p.s. 1-7, 7 lbs. @ 1/6.
 " Hypophosph. Co. p.s. B.P.C., 1 lb. @ 3/4 lb.
 " Iodi Fort. B.P., 5 lbs. @ 4/9 lb.
 Ol. Caryoph. Ang., B.P., 9 lbs. @ 3/3 lb.; 4 1/2 lbs. @ 3/5 lb.
 Ol. Cocoa Nuclei finest White, 80 lbs. @ 48/6 cwt.; 40 lbs. @ 6d. lb.
 Ol. Eucalypt., B.P., 1 cwt. @ 1/1 lb.; 28 lbs. @ 1/2 lb.; 9 lbs. @ 1/3 lb.
 Ol. Menth. Pip., Hotchkiss original bts. 21 oz. each 18 bts. @ 10/- 0 lb.; 6 bts. @ 11/1 lb.; single bts. @ 1 1/4 lb. American 20 lbs. @ 8/9 lb.; 4 1/2 lbs. @ 9/- lb.; 1 lb. @ 9/4 lb.; Japanese, 50 lbs. @ 5/9 lb.; 5 lbs. @ 6/3 lb.
 Ol. Morrhuæ, Nov. 1909, finest non-freezing 25 gall. tin lined barrels @ 77/- per barrel; 2 gall. tins @ 8/- each.
 Ol. Olive, P.B., Flav., 45 gall. Barrel @ 4/3 gall.; 2 gall. @ 5/3 gall.
 Ol. Ricini Alb. Opt. Medicinal, 176 lbs. @ 38/- cwt.; 88 lb. @ 41/- cwt.; 44 lbs. @ 42/8 cwt.; 9 lbs. @ 6d. lb.; for export, 1 cwt. drums recommended, 7/6 each extra or 3 1/2 cwt. barrels @ 34 1/4 cwt.
 Pulv. Glycyrrh. Co. B.P. (Green), English Ground, 56 lbs. @ 33/- cwt.
 " Tinct. Benzoin Comp., P.B., 5 lbs. @ 3/5 lb.; Bond, 8d.
 " Tinct. Camph. Comp., P.B., 5 lbs. @ 2/5 lb.; Bond, 6 1/2 d.
 " Tinct. Cantharidis, P.B., 5 lbs. @ 3/9 lb.; bond, 6d. lb.
 " Tinct. Capsici, B.P., 5 lbs. @ 3/3 lb.; bond, 6d. lb.
 " Tinct. Card. Comp., P.B., 5 lbs. @ 2/6 lb.; bond, 6 1/2 d. lb.
 " Tinct. Catechu, P.B., 5 lbs. @ 2/8 lb.; bond, 6 1/2 d. lb.
 " Tinct. Chlorof. a. Morpb. Comp., B.P., 1886, 5 lbs. @ 1/11 lb.; bond, 1/5 1/2 lb.
 " Tinct. Cinchon. Comp., B.P., 5 lbs. @ 3/4 lb.; bond, 10 1/2 d. lb.
 " Tinct. Cinchon. Rub., P.B., 5 lbs. @ 8/- lb.; bond, 10d. lb.
 " Tinct. Digitalis, B.P., 5 lbs. @ 2/8 lb.; bond, 6 1/2 d. lb.
 " Tinct. Gelsem. B.P., 5 lbs. @ 2/10 lb.; Bond, 6d.
 " Tinct. Gentianae Comp., B.P., 5 lbs. @ 1/11 1/2 lb.; bond, 6 1/2 d. lb.
 " Tinct. Hyoscyami, B.P., 5 lbs. @ 2/5 lb.; bond, 6 1/2 d. lb.
 " Tinct. Iodi B.P., 5 lbs. @ 3/11 lb.; bond, 1/1 1/2 lb.; decolor, 5 lbs. @ 4/3 lb.; bond, 1/10.
 " Tinct. Lavandulae Comp., B.P., 5 lbs. @ 3/10 lb.; bond, 7 1/2 d. lb.
 " Tinct. Myrrhae, B.P., 5 lbs. @ 3/9 lb.; bond, 9 1/2 d. lb.

CAMPHOR OLIVE OIL SHELLAC

- Bals. Copaiba pure, 44 lbs. @ 1/11 lb.; 9 lbs. @ 2/2 lb.; 1 lb. @ 2/6 lb.
Cocaine Hydrochlor. B.P., 25 ozs. @ 7/6 oz.; 7 oz. @ 7/9 oz.; 1 oz. @ 8/- oz.
Cream Tartar, 98% powder, 1 cwt. @ 74/- cwt.; 28 lbs. @ 9d. lb.
 Ess. Limonis (oil) 12 lbs. @ 3/- lb.; 6 1-lb. Bts. @ 3/6 lb., not guaranteed absolutely pure.
 *Ext. Belladonnae Liq. B.P., 5 lbs. @ 4/7 lb.; 1 lb. @ 5/- lb.; solid, 7 lbs. @ 2/7 lb.
Ext. Cascara Sag. Liq., B.P., 10 lbs. @ 1/2 lb.
 *Ext. Ergot. Liq. P.B., 5 lbs. @ 2/11 lb.; 1 lb. @ 3/2 lb.
 Ext. Gent. P.B. Solid, 1 cwt. @ 8 1/2 lb.; 7 lbs. @ 9 1/2 lb.
 " Glycyrrh. Liq. B.P., 6 lbs. @ 1/4 1/2 lb.
 Ext. Hyoscyam., Solid, B.P., 3 lbs. @ 4/11 lb.; 1 lb. @ 5/3 lb.
 *Ext. Ipecac. Liq. P.B., 5 lbs. @ 10/6 lb.; 1 lb. @ 11/3 lb.
 *Ext. Nuels Vom. Liq. B.P., 5 lbs. @ 3/- lb.; 1 lb. @ 3/3 lb.
 Ferri Ammon. Cit., P.B., 28 lbs. @ 1/4 1/2 lb.; 7 lbs. @ 1/7 lb.
 Ferri et Quininae Cit., P.B.; 500 ozs. @ 3d. oz. 100 ozs. @ 3 1/2 oz.; 25 ozs. @ 3 1/2 oz.
 Formaldehyde, 40%, 132-lb. Carboys @ 52/- each 7 lbs. @ 7 1/2 lb.
 Glycerin. Opt., D.D., 1-260 P.B., 1 cwt. @ 90/- cwt.; 56 lbs. @ 100/- cwt.; 12 lbs. @ 1/1 1/2 lb.
 Honey, Jamaica, fine White Set, 3 1/2 cwt. @ 36/- cwt.; 28 lbs. @ 47/- cwt.
 Lin. Campn. P.B., 40 lbs. @ 10 1/2 lb.; 9 lbs. @ 11 1/2 lb.
 Lin. Sapo Meth., 9 lbs. @ 7d. lb.
 Linseed. C. Oil, Crushed, 3 cwt. @ 18/- cwt.; 1 cwt. @ 16/6 cwt.
 *Liq. Ammonii Acetatis Cono. 1-7, 6 lbs. @ 8d. lb.; 1 lb. @ 10 1/2 lb.
 Quininae Sulph., B.P., 100 oz. @ 6 1/2 d. oz.; 25 oz. @ 1 1/2 oz.; 10 oz. @ 8d. oz.
 Salol. B.P., 7 lbs. @ 2/3 lb.; 1 lb. @ 2/6 lb.
 Sng. Draconis pulv., English Ground, 1 cwt. @ 1/10 1/2 lb.; 7 lbs. @ 2/10 1/2 lb.
 Santonine, P.B. 7 lbs. @ 38/- lb.; 1 lb. @ 39/- lb.
 Sapo Cast. Alb. 10 cwt. @ 21/- cwt.; 2 cwt. @ 25/- cwt.; 7 lbs. @ 3 1/2 lb.; pulv., 1 cwt. @ 60/6 cwt.; 56 lbs. @ 64/- cwt.; 7 lbs. @ 7 1/2 lb.; Animal pulv., 1 cwt. @ 54/- cwt.; 56 lbs. @ 6d. lb.; 7 lbs. @ 7d. lb.
Shellac (Orange), 1 1/2 cwt. @ 72/- cwt.; 7 lbs. @ 10d. lb.
 Soda Salicyl. Pulv., 7 lbs. @ 1/5 lb.; phys. pur. 28 lbs. @ 2/2 lb.; 1 lb. @ 2/5 lb.
 *Spt. Ether Nit. P.B., 4 1/2 lbs. @ 3/6 lb.; 1 lb. @ 3/9 lb.
 *Sp. Ammon. Aromat. P.B., 5 lbs. @ 2/8 1/2 lb.
 *Spt. Chloroformi, P.B., 5 lbs. @ 3/7 lb.
 *Syr. Aurant. P.B., 7 lbs. @ 9d. lb.
 *Syr. Easton B.P., 7 lbs. @ 1/- lb.
 " Ferri Iodid. P.B., 7 lbs. @ 1/1 lb.
 " Ferri Phosphat. Co., 7 lbs. @ 5d. lb.
 " Hypophosph. Co. B.P.C., 7 lbs. @ 9d. lb.
 " Pruni Virg. B.P., 8 lbs. @ 7d. lb.
 " Rhamni, 7 lbs. @ 10d. lb.
 " Rhei P.B., 7 lbs. @ 7 1/2 lb.
 " Scilla P.B., 7 lbs. @ 4 1/2 lb.
 " Senna P.B., 7 lbs. @ 8d. lb.
 " Syr. Tolut. P.B., 7 lbs. @ 7d. lb.
 " Tinct. Aurantii Recens, B.P., 5 lbs. @ 3/8 lb.; Bond 8 1/2 d.
 " Tinct. Belladon., B.P., 5 lbs. @ 2/11 lb.; Bond, 6 1/2 d.
 " Tinct. Nucis Vom., B.P., 5 lbs. @ 2/10 lb.; bond, 6d. lb.
 " Tinct. Opil., B.P., 5 lbs. @ 3/5 lb.; bond, 2/- lb.
 " Tinct. Opil Ammon., B.P., 5 lbs. @ 3/4 lb.; bond, 2/0 1/2 lb.
 " Tinct. Opil Aquos., 5 lbs. @ 2/1 lb.
 " Tinct. Quininae Amm., B.P., 5 lbs. @ 2/6 lb.; bond, 11d. lb.
 " Tinct. Rhei Co., B.P., 5 lbs. @ 2/2 lb.; bond, 8d. lb.
 " Tinct. Scilla, B.P., 5 lbs. @ 2/6 lb.; Bond, 7 1/2 d.
 " Tinct. Senega, P.B., 5 lbs. @ 3/1 lb.; bond, 1/3 1/2 lb.
 " Tinct. Strophanth., P.B., 5 lbs. @ 3/5 lb.; bond, 8 1/2 d. lb.
 " Tinct. Valeriana, 5 lbs. @ 2/8 lb.; bond, 6d. lb.
 " Tinct. Valeriana Ammon., P.B., 5 lbs. @ 3/1 lb.; bond, 8 1/2 d. lb.
 " Tinct. Zingib., P.B., 5 lbs. @ 4/- lb.; bond, 6 1/2 d. lb.
 " Tinct. Zingib. Fortior, 5 lbs. @ 4/3 lb.; bond, 10 1/2 d. lb.
 Treacle (Black), 5 1/2 cwt. @ 7/6 cwt.; 24 lbs. @ 2d. lb.
 Ung. Acid. Boric. P.B., 28 lbs. @ 6 1/2 d. lb.; Flav. 28 lbs. @ 4 1/2 d. lb.
 " Paraff. Alb., P.B., 28 lbs. @ 7d. lb.; 7 lbs. @ 8d. lb.; 1 lb. @ 10d. lb.; Flav. 28 lbs. @ 6d. lb.; 7 lbs. @ 6 1/2 d. lb.
 Zinci Oleat. Powder B.P.C., 7 lbs. @ 2/- lb.
 Zinci Oxid., Whitest and Lightest B.P., 1 cwt. @ 34/- cwt.; 28 lbs. @ 4 1/2 lb.; 7 lbs. @ 5d. lb.

*Minimum quantity at these prices, Home Trade, 8 Winchester Quarts assorted. Export, 12 Winchester Quarts assorted

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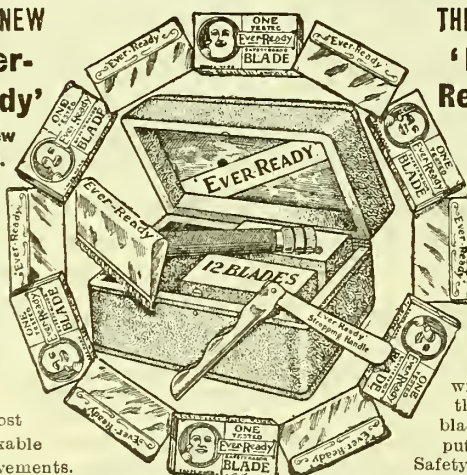
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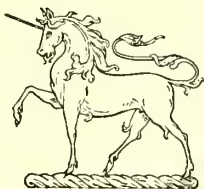
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TRADE FOR OVERSEAS.

The present year shows every indication of another boom in export trade. During the latter part of 1909 there was a steady increase in exports and imports to and from Great Britain, while January 1910 shows an increase of nearly

Ten Millions Sterling.

Manufacturers and wholesale dealers connected with chemical industry, pharmacy, and the drug-trade are therefore reminded that their special opportunity for securing, or increasing, export trade occurs on

March 12,

when the Export Merchant Shippers' Issue of THE CHEMIST AND DRUGGIST will be published. Those firms who have not already done so are advised to communicate with the publisher, 42 Cannon Street, London, E.C., with regard to advertising space.

Summary of this Issue.

The more notable items only are dealt with.

Articles and Communications.

"Xrayser II." is of opinion that the registration of chemists and druggists is not keeping pace with the growth in population (p. 253).

Red-clover flowers have yielded to the research of Drs. Power and Salway some interesting products, including constituents of beeswax (p. 273).

Mr. Pyman, of Dartford, has got still closer to the production of a synthetic body with the physiological properties of the suprarenal gland (p. 259).

A variety of subjects are discussed by correspondents, one of the most interesting being thoughts on the chemist in fiction, by Mr. O. Waddington (p. 267).

We give some particulars of the rulings of the Australian Customs authorities as to their attitude towards proprietary medicines, and what is said about them (p. 255).

The German Government is promoting a Bill for the purpose of making the output of the potash mines a State monopoly. The measure is fully explained in an article on p. 256.

During January the exports of manufactured goods from the United Kingdom were valued at six millions more than the exports of January 1909. Imports were two millions more, and re-exports were also better (p. 254).

Dr. Edridge-Green gave a Royal Society of Arts' audience some interesting particulars of his lamp for detecting colour-blindness. He also showed the untrustworthiness of the official wool-test which is used for testing the eyes of engine-drivers and look-out men (p. 262).

In a brief editorial note on the word "Pharmacy" we advise pharmacists to keep the subject alive (p. 257). Mr. Idris has explained why it was not covered by the 1908 Act, and the President of the Board of Education has stated that he will support a Bill to restrict the description to chemists (p. 261).

Messrs. C. A. Hill and J. C. Umney communicated to the Pharmaceutical Society on Tuesday evening a paper dealing with the British Pharmacopœia essential-oil monographs, and suggesting changes, as well as several new monographs (p. 270). It was agreed by experts at the meeting that the authors' suggestions were good (p. 258), but criticism is invited (p. 257).

The Week's News.

A number of minor legal cases are reported in the Irish News section (p. 243).

The Cape Stamp Act is being vigorously enforced. Three actions are reported on p. 245.

Agri-horticultural poison licences are again to the fore. A column about them is on p. 251.

A portrait of Mr. R. A. Robinson by Sir W. Q. Orchardson, R.A., was presented to the London County Council on Tuesday (p. 250).

The New Zealand Pharmacy Board has failed in an action against an unqualified person who called his shop a pharmacy (p. 244).

The first test-case against the National Cash Register Co., Ltd., has been heard in the High Court this week, and decided in favour of the company (p. 246).

Mr. Jacob Hertz was heavily fined at the Mansion House Police Court on Wednesday for selling as a patented article an inhaler which was not patented (p. 242).

The ammonia-soda process was the principal subject at the Society of Chemical Industry meeting, reported on p. 257. It is now proposed to use sodium nitrate in place of chloride.

It has occasionally been rumoured that soya-bean meal is poisonous. A case has been before the Court of Session, Edinburgh, in which evidence of the presence of a cyanogenetic glucoside was given (p. 247).

Trade and Market Matters.

The Chamber of Commerce (Chemical-trade Section) will, on Friday afternoon, February 11, consider, *inter alia*, the railway companies' reception of the deputation *re rates*.

Market conditions are materially unaltered, with few features or important alterations. Saffron, chaulmoogra oil, cloves, new cod-liver oil, and damiana are all more or less dearer. Opium still tends downward, and reductions have also been made in British castor oil and shellac. Moderate supplies of drugs were offered at the "usual" auctions (p. 263).

English and Welsh News.

When sending Newspapers containing Trade news to the Editor please mark the items.

Brevities.

The fund which is being raised by Sir William Treloar for Mr. H. W. Cox has now reached 1,500*l.* The aim is to raise 2,000*l.*

Plans on behalf of Cadas, Ltd., soap-makers, for a new milling-room and label-store at Ward Road, Stratford, have been passed by the West Ham Corporation.

The net cost to the rates of the Islington Borough Council's prosecution with a view to determining the question, "What is whisky?" was 2,062*l.* 18*s.* 4*d.*

Boots' Pure Drug Co., Ltd., have acquired extensive premises in Station Road, Nottingham. The site will be utilised for the erection of the firm's new offices.

The employés of Messrs. Burroughs Wellcome & Co., Ltd., have contributed 124*l.* 16*s.* 2*d.* to the funds of the Livingstone Cottage Hospital, Dartford, during the past year.

The London County Council on February 8 rescinded its resolution granting a licence to the British Petroleum Co. to keep 270,000 gals. of petroleum spirit at premises in Fulham.

An exhibition of rapid bromide printing machines and printing frames for lantern slides, stereoscopic, post-card, and ordinary photographic work is being held at the office of the "British Journal of Photography," 24 Wellington Street, Strand, London, W.C.

The correspondence in the local Press has resulted in a meeting of Newport (Mon.) chemists, and a decision to close on Mondays, Tuesdays, and Wednesdays at 8.30 p.m., commencing on February 14. A majority were in favour of closing at 8 p.m., but the later hour was decided upon for the sake of unanimity.

At a meeting of the Cardiff Workhouse Visiting Committee, on February 8, attention was called to the increase in the cost of drugs and dressings. Whereas for the year ended Lady Day 1904 the cost was 255*l.*, or 15*s.* per head, it had increased for the year ended Lady Day, 1909, to 669*l.*, or 1*l.* 6*s.* 2*d.* per head. It was decided to investigate the matter.

According to a Press Agency, a London specialist has sustained the loss of a quantity of radium worth about 800*l.* The tubes containing the precious product were inadvertently thrown into the fire along with some soiled bandages during the owner's absence. The supply was insured, and attempts are to be made to recover the radium from the flues.

Captain Frederick E. Guest, son of Lady Wimborne, was elected member for East Dorset last month, and on the poll being declared he addressed his supporters from the window of the Crown Hotel, Wimborne. A picture postcard of the event has now been published, and in it the swinging sign of Mr. F. K. Rowe, pharmacist, The Square, Wimborne, is as prominent an object as the gallant Captain; indeed, part of the enthusiastic crowd appears to be cheering "Rowe, chemist and pharmacist."

At Banbury Petty Sessions on January 31, Mr. George Kingerlee, chemist and druggist, Castle Street, Buckingham, was ordered to pay costs, including witnesses' fees, under a summons by the local Corporation for 15*l.* 17*s.* 6*d.*, expenses incurred in carrying out drainage work in order to abate a nuisance on defendant's property in Middleton Road, Grimsbury. A cheque from Mr. Kingerlee for the amount claimed, but nothing on account of costs, had been received by the Town Clerk on the morning of the prosecution.

Petroleum Committee.

Further evidence was given at the Home Office on February 3. Lieut.-Colonel C. J. Fox, chief officer of the London Fire Salvage Corps, desired a central authority to deal with petrol-storage and stringent regulations regard-

ing its sale. Buildings containing petrol should be plainly marked and the fitting of safety devices rendered compulsory.—Mr. A. H. Bodkin, who was counsel in the recent manslaughter charge in connection with the carbon-tetrachloride shampoo fatality, considered that the use of carbon-tetrachloride and petrol should be prohibited entirely on the living person.—The Master and two members of the Incorporated Guild of Hairdressers, Wigmakers, and Perfumers agreed with Mr. Bodkin.—Mr. E. Foxe, Inspector of Petroleum, Ballsbridge, co. Dublin, stated that the labels in use at present are insufficient, and considered that petrol-tins should be improved.

Fatal Dispensing Error.

An inquiry was held at Wigan on February 3 relative to the death of Mary Moran (66), widow. The evidence showed that her son-in-law, named Gorman, gave deceased "three-parts of an egg-cupful" of a mixture supplied by the local Poor-law Union, containing digitalis, compound spirit of ether, tincture of nux vomica, and compound infusion of gentian, "to see what sort of a face she would pull." Deceased became ill and died shortly afterwards. An analysis by Mr. H. Heap, M.Sc., of Manchester University, showed that the mixture contained $\frac{1}{4}$ grain of strychnine in each tablespoonful, a greater amount than was required by the prescription. Mr. Arthur Stavely, the Union dispenser, stated that he could only account for the excessive amount of strychnine in the mixture by supposing that he had picked up the wrong bottle and filled up the mixture with tincture of nux vomica instead of gentian. The verdict of the jury was "Death by misadventure, in consequence of a mistake by the dispenser."

Sale of Food and Drugs Acts.

Sixteen samples of drugs were analysed in Paddington during 1909. All proved to be genuine.

The Southwark analyst reports that the ten samples of drugs taken during the past three months gave satisfactory results.

Two samples each of iron pill, oil of eucalyptus, and ammoniated tincture of quinine were taken for analysis in the City of London. All were returned as genuine.

Two samples of fluid magnesia were unfavourably reported upon by the Bristol analyst during the last year. These were the only drug samples not up to the required standard.

The Lambeth analyst (Dr. John Muter) reports that eight samples of drugs were taken and found to be genuine. They were tartaric acid (2), cream of tartar (2), camphorated oil (2), milk of sulphur (1), and eucalyptus oil (1).

One sample of each of the following drugs was examined in Poplar during the past quarter: Mercury ointment, camphorated oil, soap liniment, Gregory's powder, grey powder, compound liquorice powder. All were certified to be of correct strength.

Among the samples examined by the Sheffield analyst during the last quarter were five samples of camphorated oil, one of which was slightly deficient in camphor. Of five samples of sweet spirit of nitre, one contained less than one-half of the minimum proportion of ethyl nitrite. Two samples of tincture of iodine were genuine.

Nine drug samples (lime water, sweet nitre, camphorated oil, and compound liquorice powder) were examined by the Rochdale analysts last quarter. A sample of sweet nitre contained only three-fourths of the prescribed amount of ethyl nitrite, while another of lime water was 60 per cent. deficient in lime. The other samples were genuine and of good quality.

The Bristol analyst reports that the following samples were analysed during 1909: Glycerin, 7; mineral water, 6; olive oil, 6; camphorated oil, 5; lemonade crystals, 4; fluid magnesia, 4; castor oil, 3; tincture of iodine, 3; sweet spirit of nitre, 2; compound liquorice powder, 2; sulphur tablets, 1; sulphur ointment, 1; zinc ointment, 1; eucalyptus oil, 1; oil of almonds, 1; Epsom salts, 1; cod-liver oil, 1. All except two samples of fluid magnesia were found to be genuine.

The Sheffield city analyst (Mr. G. E. Scott-Smith, F.I.C., F.C.S.) reports that during the December quarter 201 samples were examined. Of nine samples of pepper eight were genuine and the remaining one of a suspicious character. One out of five samples of camphorated oil was found to be deficient in camphor. Two samples of tincture of iodine proved to be of standard strength, as also four out of five samples of sweet nitre which were satisfactory, but the fifth was deficient in ethyl nitrite.

Sheffield Notes.

Councillor A. Russell Fox is steadily recovering from his recent illness, and is now able to get out for a little while.

Some excitement has been caused in local electro-plating circles by the new method of plating by means of galvanit. Mr. Augustus Rosenberg is to explain his process before a meeting on February 21.

Nature and Causation of Pellagra.

A fund towards which the Colonial Office has contributed 1,500*l.*, has been opened to meet the expenses of the proposed investigation of pellagra, a disease widely prevalent in Italy and various parts of Spain, Roumania, and the British Empire. A representative committee has been formed in London for its systematic inquiry, and Dr. L. W. Sambon, who has suggested that pellagra, like sleeping sickness, is due to a blood parasite, is to proceed to a pellagrous area to conduct investigations as to the cause and mode of spreading of the disease. A general *malaise*, accompanied by a rash, usually in spring, is the first symptom of pellagra. Next year the conditions get worse and the languor increases, and sensibility diminishes in each successive year as the sufferer becomes gradually mummified. Chronic cases frequently terminate in hopeless insanity. General tissue degeneration is found on examination after death.

Attractive Window-displays.

The recent decision of one of the metropolitan Magistrates imposing penalties on Messrs. Swan & Edgar for obstructing the footway by causing a crowd to assemble owing to a specially attractive window-display has caused a great amount of dissatisfaction among metropolitan shopkeepers. With a view to taking action in the matter, a meeting of traders and editors of trade journals was held at the Holborn Restaurant on February 7, when Mr. Poye Vise, of the "Stationer," presided, and pointed out that while the crowds outside newspaper offices, theatres, and music-halls are regulated without any penalties attaching to the proprietors, traders are not even allowed the privilege of paying for police to regulate crowds. Mr. Catesby, of Tottenham Court Road, who had been fined for causing an obstruction, and Mr. Hamley, of mechanical-toy fame, spoke at length, sympathising with the movement to obtain a decision; and eventually a resolution was passed expressing the opinion that at times of special sales and at Christmas time the police should be authorised to afford to traders the same assistance in the prevention of congestion of traffic as is afforded to theatres and other places of entertainment and on the same terms, and that a deputation wait upon the Commissioner of the Metropolitan Police for the purpose of laying its views before him. As only eight traders were present, it was agreed to hold a meeting after Easter, when the deputation will be appointed.

The Co-operative Movement.

The report of the Batley Co-operative Society, Ltd., for the quarter ended January 10 shows a net profit of 17*l.* 4*s.* 6*d.* on sales worth 301*l.* 6*s.* 2*d.* The total sales amounted to 39,456*l.* 0*s.* 6*d.*, with a net profit of 4,954*l.* 11*s.* 2*d.* The stock at the end of October 1909 was 18,739*l.* 13*s.* 4*d.*, including stock valued at 1,012*l.* 10*s.* 8*d.* in the drug-department. Goods to the value of 211*l.* 10*s.* 6*d.* were supplied by the drug-department to other departments during the quarter. The rate of profit on drug-sales was 1*s.* 1½*d.* in the pound, while the expenses absorbed 69*s.* 10*s.*, or at the rate of 4*s.* 7½*d.* in the pound. The general rate of dividend recommended for distribution is 2*s.* 8*d.* in the pound.

Birmingham Notes.

The late Professor Hillhouse presented 400 volumes to the new University Library. This is under the direction of Mr. W. H. Cope, whose courtesy and unvarying kindness to pharmacists in search of book references is well known.

In the monthly issued among the workers of Messrs. Cadbury Bros., at Bournville, it is stated that they have on sale tooth-paste in collapsible tubes at 4*d.* each, and a tooth-wash of two flavours at 5*d.* As no profit is made on the sales, none but the Cadbury employes can be supplied.

In an article on the "Heraldry of the House" the "Mail" states that Mr. Alfred Bird belongs to the great Midland family of that name found centuries ago at Budlip, in Gloucestershire. An old-time herald, commenting upon the antiquity of the name, says, "There were Byrdes in the Arke."

There must be a number of laymen who contemplate from time to time putting proprietary medicines on the market judging from the number and frequency of inquiries to the "Birmingham Daily Post" *re* the mode of procedure. The "Post's" replies are generally accurate and happily accompanied by a salutary caution as to the course to be followed.

The Mayoral Ball was held last week, and was a brilliant affair. Among those present were Sir Thomas and Lady Barclay and family, Mr. Marshall Freeman, Mr. Wm. Adams, Mr. F. Barlow, Mr. J. F. Liverseege (city analyst), Alderman Clayton (the Chancellor of the City Exchequer), Mr. W. T. Elliott, Mr. C. S. Baynton, Mr. A. Bird, Mr. F. Bird, Mr. Coole Kneale, Mr. A. Southall, and Mr. John Wakefield.

Grocer-chemists.

At the monthly meeting of the Mid-Rhondda Grocers' Association on February 3, Mr. Meredith again called attention to the sale of groceries by chemists, and submitted as a substantive proposal that grocers should adopt a policy of retaliation and take out a licence to enable them to sell patent medicines. They could fortify the position still further by buying in combination, and so saving an additional 12½ to 15 per cent. Mr. James Price, who elicited from Mr. Meredith that the articles complained about were tinned goods, stated that grocers were to blame for selling patent medicines and so cheapening articles appertaining to the chemists' business. The Chairman pointed out that the members "were all more or less mixed up in a lot of businesses." He did not see that it would be advisable to proceed with the matter by resolution. Mr. Meredith intimated that he was not keen on passing a resolution, being satisfied with having called attention to the matter.

Wine-licenees.

At the Hull Brewster Sessions on February 7, the application of Mr. A. S. Snowden, chemist and druggist, 442 Anlaby Road, Hull, for a medicated-wine licence was refused.

At Morpeth Brewster Sessions on February 2, the application of Mr. Arthur Tempest Rutherford, chemist and druggist, Red Row, Broomhill, for a medicated-wine licence, was refused.

At Reading Licensing Sessions, on February 2, Mr. Geo. Fraser, managing director of Bradley & Bliss, Ltd., chemists, 4 and 6 London Street, Reading, was granted a medicated-wine licence.

At Tynemouth Brewster Sessions on February 4, the wine-licence held by Mr. T. S. Stonier, chemist and druggist, 8 Railway Street, Tynemouth, was transferred to new premises at the corner of Nile Street.

At Otley Brewster Sessions on February 4, Mr. J. W. Mainprize, chemist and druggist, applied for a wine-licence for his pharmacy at 35 Kirkgate, Otley. Mr. Mainprize formerly held a licence for his old premises at No. 19 in the same thoroughfare, which lapsed in December last. No objections were raised, and the application was granted.

The Timothy White Co., Ltd., chemists, 121 High Street, Gillingham, applied to the Rochester County Justices at the annual general licensing meeting at Chatham, on

February 8, for an off wine-licence. Mr. F. C. Boucher supported the application, and stated that only medicated wines would be sold. Opposition was put forward on behalf of the Railway Hotel opposite, and Mr. W. J. T. Croft, wine and spirit merchant, Gillingham, but the Bench decided to grant the application with an endorsement on the licence that only medicated wines should be sold.

Various Charges.

At the West Ham Police Court on February 4, Ernest Hagler (32), seaman, was remanded on a charge of obtaining 11. 17s. from Mr. Edward Miller, chemist and druggist, 273, Victoria Dock Road, London, E., upon a spurious advance note.

At Greenwich Police Court on February 9, Philip Smith was charged with breaking into the shop of Boots Ltd., 76 High Street, Lewisham. He was arrested in the early morning as he was leaving by the skylight, and a number of fancy goods were found ready packed. Prisoner was remanded.

At Middlesbrough this week, Richard Rhodes (17) and William Smith (14) were bound over under the Probation Act on several charges of theft. The boys had been employed by Mr. J. Crosby Robson, chemist and druggist, Linthorpe Road, whose till had been robbed constantly during the past few months.

At Stockport on February 2, George Fuller and Charles Archer were committed for trial to the Quarter Sessions on a charge of breaking into the premises of Mr. Robert Taylor Forbes, chemist, 48 Castle Street, Edgeley, and stealing 10s. in money and goods to the value of 41. 15s. The accused, when arrested, had the stolen articles in their possession.

At the Central Criminal Court on February 8, John Wilkinson (38), stoker, was sent to four years' penal servitude for his connection with the safe-robbery at Goswell Road sub-post office, where Mr. David White, chemist and druggist, is sub-postmaster (*C. & D.*, January 22, p. 99). Prisoner had been too ill to appear at the trial with his fellow offenders.

At the Essex Assizes, Mr. Justice Jelf, remarking that he regarded both as equally guilty, ordered Rosa Grayford (40) and Henry Bisping (28) to undergo twelve months' imprisonment each, with hard labour, for conspiring to obtain goods by worthless cheques (*C. & D.*, January 15, p. 67). Bisping was stated to have been formerly in business as a chemist at Southall.

At Chesterfield on February 5, Maurice Bland, of New Whittington, was sentenced to three months' hard labour and recommended for deportation as an undesirable alien for victimising various people. Prisoner went round representing that he was from the Sheffield Royal Hospital, and also manager of "The North of England Optician Company," and persuaded his victims to have their eyes tested. In two cases he obtained gold-rimmed spectacles to refit with suitable glasses, but his clients heard no more about him and eventually informed the police.

At the Kingston Police Court on February 7, Henry Macdonald, chemist's assistant, Merton, was charged with loitering outside the establishment of Boots Ltd., Market Place, Kingston, and further with being drunk at the time. Accused, who had been formerly employed at Boots, was seen to try the shop-door and look through the letter-box in a suspicious manner. The Magistrate said that whilst he thought the police were quite justified in arresting accused there was not enough evidence to convict on the first charge, and the second charge was also dismissed.

"Dr. Hertz's Perfect Inhaler."

At the Mansion House Police Court on February 9, Jacob Hertz, trading as Hertz & Co., 9 Mincing Lane, appeared before Mr. Alderman Johnson upon a summons under the Merchandise Marks Act for applying a certain false description to an inhaler, and also, under the Patent Act (1907), for representing that the article was patented. Mr. Tebbs prosecuted. The case for the prosecution was that the defendant sold an inhaler represented as "Dr. Hertz's Perfect Inhaler, patent number 347,538." When

introducing the inhaler to Messrs. Allen & Hanburys, he said he was the father of Dr. Hertz. The article in question, counsel remarked, was not patented at all, and Dr. A. F. Hertz, of Guy's Hospital, the only medical man of that name on the register in this country, who was the prosecutor, said the defendant was not related to him or connected with him in any way, nor had he anything to do with an inhaler. In defence, defendant claimed that he was simply the agent for the vendor of the article, and the representations were only those that had been conveyed to him by his principal in America. He understood that the inhaler was the invention of Dr. Hertz, of Antwerp, and that it was patented in Germany and in England. He denied that he had said he was the father of Dr. A. F. Hertz and repudiated the idea that he had committed any offence. The Alderman remarked that he regarded the sale of the article as described as a distinct fraud, and fined the defendant, on the first summons, 20*l.*, with 10*l.* 10*s.* costs, and on the second, under the Patent Act, 5*s.*, and 2*s.* costs.

"Infant's Preservative."

The Nottingham City Coroner (Mr. C. L. Rothera) conducted an inquiry on February 1 into the death of Alice Bonser, aged six weeks, at Radford. Dr. Moysey, who had attended deceased, had prescribed some medicine for her, and the mother had also administered 14 drops of an "Infant's Preservative" each night for a week prior to her death. The mother stated that she did not read the whole of the directions on the label. There was no indication as to how often the dose was to be given. The Coroner read the following footnote on the label: "This preparation contains, among other valuable ingredients, a small amount of morphine, and in accordance with the Pharmacy Act is labelled 'poison.'" The Coroner remarked that the label was a plain white one, and although the word "poison" was in a little larger type than the rest, it was still small. Dr. Moysey deposed that death had been accelerated by doses of opium, which would have a cumulative effect night after night. The child weighed only 41b. 8 oz. Mr. Wilfred Smith, assistant with Messrs. Bass & Wilford, chemists, Nottingham, stated that the "preservative" was mixed by him under the superintendence of a fully qualified chemist. It contained 3 drops of laudanum to each teaspoonful. Purchasers simply asked for it by name, and were supplied.—The Coroner: A very, very loose way of dealing with things of this kind. Nothing suggests how frequently a dose is to be taken.—Witness, continuing, said there is a large sale for the preparation, about three gallons per week. The firm had sold it for ninety years. The jury returned a verdict of "Death from debility, accelerated by a dose of an opiate and want of medical attention," and recommended that some better means be adopted of indicating the character of the preparation.—The Coroner remarked that the label complied with the letter, but hardly with the spirit of the Act. It was strongly deficient in not expressly stating how frequently the dose was to be given.

Football.

Burgoyne Burbidges F.C. v. Old Boys' F.C.—This match, played at Wadham Lodge, Walthamstow, on February 5, resulted in a win by the Old Boys by 3 goals to nil.

Irish News.

When sending Newspapers containing Trade news to the Editor please mark the items.

Brevities.

Mr. J. Edgar Connor, J.P., pharmaceutical chemist, has been elected President of the Newry Chamber of Commerce.

The annual meeting of the Chemists' and Druggists' Society of Ireland is to take place on February 24 at 11 Waring Street, Belfast. This year the committee are combining the business meeting with the annual social, instead of having the former in the forenoon as on other occasions.

In the Courts.

James Kinnear, an assistant with Messrs. Tait & Co., Capel Street, Dublin, who was charged with forging a cheque (*C. & D.*, January 29, p. 134), was, at the Dublin Commission Court on February 4, sent to prison for twelve months.

Messrs. A. & R. Thwaites & Co., Ltd., aerated-water manufacturers, Dublin, were on February 4 summoned at the instance of the Inspector of Factories for permitting employes to work at a soda-water machine without wearing face-guards and arm-gauntlets. After hearing the evidence the Magistrate dismissed the case against the Company, but fined one of the workmen 1*l.* for not complying with the rules.

At Downpatrick Quarter Sessions this week twelve claims were heard, amounting in all to over 100*l.*, for the alleged malicious poisoning of thirteen dogs. Mr. Johnston, solicitor for the County Council, raised the preliminary objection that the poisoning of a dog is not a subject for compensation, which can only be given where a crime was punishable by indictment. The malicious destruction of a dog is not punishable by summary conviction. Judge Orr dismissed the claims without costs.

The case of *Keogh v. The Incorporated Dental Hospital of Ireland* (see *C. & D.*, July 3, 1909, p. 3) came before the Dublin King's Bench Division on February 8. The plaintiff claimed damages for libel because he had been refused admission to the hospital lectures. He looked upon this refusal as a reflection upon his character. It was claimed that the communication which was sent to the plaintiff was privileged. The Judge directed the jury to find for the defendants, as the evidence before them showed that the communication was privileged. The case is to be carried further.

Scots News.

When sending Newspapers containing Trade news to the Editor please mark the items.

Aberdeen.

The University authorities report a considerable increase in students in the medical and science departments for the past year.

Dr. A. T. Gordon Beveridge, M.A., M.B.C.M., has been appointed to the post of police-surgeon in succession to Professor Matthew Hay resigned. Many chemists in business will remember Dr. Beveridge as the botany teacher in Robert Gordon's College, under the Science and Art Department evening classes.

Edinburgh.

Mr. John Nesbit, Ph.C., Portobello, an ex-Chairman of the North British Branch of the Pharmaceutical Society, has been appointed a Justice of the Peace for the county of Edinburgh.

Mr. J. Laidlaw Ewing, as Master of the Edinburgh Merchant Company, received Lord Rosebery when he visited Daniel Stewart's College and George Watson's College last week. At Watson's College the cadet corps, in the garb of old Gaul, was paraded to receive his Lordship, who afterwards addressed a gathering of the senior pupils in the lecture hall, Mr. Ewing presiding.

Messrs. G. & M. Innes, chemists, Clerk Street, have an excellent topical advertisement in a small local magazine. "Halley's Comet" is the theme chosen, and present-day necessities—cameras and spectacles—for the due recording and observation of the "visit" are offered; while customers who desire to see the comet seventy-two years hence are recommended to take "Bitter Phosphates."

Liquorice, cough lozenges, and mixtures are displayed in many pharmacies this week. Last Saturday there was quite a run on chlorodyne lozenges in one district, following a striking window-show. "The motor-car has come to stay," said a speaker at a dinner the other evening; and it has become even more obvious to the man who has experienced gratifying results that the window is the best salesman in his establishment.

One family in Mid-Lothian believes that the artist who designed our Winter Number cover has been taking notes in the county on some occasion. "He'll have taken his holidays near by," said the head of the household, when a relative in the drug-trade showed him the winter scene portrayed; "it's jist a photey, an' a guid yin, o' The Beeches past Cross Roads." [Designed at 42 Cannon Street by an artist who has never been north of the border.—*Editor C. & D.*]

Glasgow.

A doctor's shop in the Cowcaddens has been closed.

At the annual exhibition of the Southern Photographic Association, Mr. T. S. Baird, F.S.M.C., has been awarded a diploma for his picture entitled "Animal Study."

A series of twelve lectures with demonstrations, dealing with the optics and chemistry of photography, and pictorial photography, commences on February 11, at 8 p.m., at the Glasgow College of Optics, 180 West Regent Street.

The maximum rates on goods proposed for the Port of London, it is feared, will operate seriously against Scottish firms. At a meeting of the Glasgow Chamber of Commerce Committee on February 7 it was agreed that a memorial should be presented by the Chamber, and the suggestion was made that associations of firms interested should combine and be represented by counsel at the forthcoming inquiry in London into schedule of rates proposed in provisional order of Port of London Authority.

In the Sheriff Criminal Court last week, Duncan McBeth, Frank Irvine, and Thos. McPherson were sentenced to terms of imprisonment for obtaining money amounting to about 30*l.* from firms by pretending that their advertisements had appeared in certain directories for the previous year, well knowing that two of these directories were not due to appear for some time, while others were fictitious. A correspondent reports that canvassers for such publications have called on several chemists recently. They do not say usually that the advertisement was paid for before, but they show a slip bearing the name and address of the man upon whom they call, and hint that it is customary to receive payment for a forthcoming insertion. *Verb. sap. sat.*

French News.

(From the "C. & D." Correspondent.)

THE FLOODS.—Messrs. T. & H. Smith, Ltd., London, have sent a donation of 2,500*fr.* (100*l.*) to the fund organised by "L'Echo de Paris."

THE FRENCH CHEMICAL SOCIETY.—On his retirement from the post of treasurer of this society, after thirty years of office, M. Arthur Petit has been presented with a gold medal and named honorary treasurer.

THE DIPLOMA.—A decree has been issued stating the conditions for the exchange of the second-class for the first-class pharmaceutical diploma. The first step is that the candidate, when entering his name for examination, shall pay fees to the amount of 50*fr.* (1,250*fr.*).

A POPULAR YOUNG CHEMIST recently revisited the scenes of his labours as an assistant in Paris. He was accompanied by his wife, who is a duly qualified pharmaceutical chemist. Paris friends wish the newly-married couple every good wish: what Paris loses, Tunbridge Wells gains.

AN ASSOCIATION OF PROFESSORS.—The professors of the various mixed schools of medicine and pharmacy in France have formed themselves into an association. Their object is to study all questions of an educational nature affecting them and also to defend their interests in case of need.

HAIR-DYES.—A Parisian pharmacist writes to a trade journal to warn his colleagues of the dangers of selling hair-dyes, especially those put up by non-pharmacists. A client sued him for 12*l.* damages for a malady caused by the use of a dye. Luckily, he adds, the manufacturer came forward and paid the damages, but he intends to give up the sale of all similar preparations in future.

PHARMACY STUDENTS.—The A.A. (Amical Association of Pharmacy Students) has elected officers for 1910. The

President is M. Chayssac, the Vice-Presidents, MM. Savournin and Tanret, and the Secretary, M. Delluc. The annual ball of the A.A. was to have taken place a few days ago at the town hall of the Fourth Arrondissement (near the Hôtel de Ville), Paris, under the patronage of the Ministère of Public Instruction, but was postponed owing to the floods.

GALEN CLUB.—The usual fortnightly meeting was held at 85 Rue Richelieu, Paris, on February 4, when a proposal for a presentation to a former member of the club was considered and passed. Mr. J. W. Kelsey (President) was in the chair, and amongst those present were Messrs. Balch (Secretary), Macdonald (Treasurer), Bond, Bouvert, Nevard, and Riley. On Saturday, February 19, a smoking concert will call forth the artistic talents of pharmacists and friends. It will be held at the above address at nine o'clock, and visitors will be welcomed.

DEATH OF M. SCHMIDT.—At the last meeting of the Paris Society of Pharmacy, M. Patein announced the recent death of M. Schmidt, an old member of the Society and its President in 1908. He was born at Logelbach, Upper Rhine, in 1851, and studied pharmacy at Colmar and Paris, taking his diploma of *Pharmacien de Première Classe* at the latter place. He secured the degree of Doctor of Pharmacy in 1903, and was an Officer of Public Instruction. As an earnest worker and a scientist of merit, M. Schmidt was well known and highly esteemed by his colleagues of the Society of Pharmacy. He was modest and unassuming, and, as M. Patein remarked in his appreciative valedictory address, "he was one of the last representatives of pharmacy of a now bygone time," but one who will leave a permanent and affectionate remembrance.

THE STUDY OF RADIO-ACTIVITY, ETC.—At the last meeting of the General Council of the University of Paris, M. Liard mentioned that the Administrative Council of the Pasteur Institute had voted *nem. con.* the proposal to establish a laboratory for the study of radio-activity and its therapeutic applications. This laboratory will adjoin the Oceanographic Institute here. The Pasteur Institute will devote to this object 400,000 francs of the Osiris Legacy (this estate is now being wound up). The University of Paris gives the land and finds the rest of the money. Mme. Curie will be directress of the physical side of the laboratory, and the other section (researches as to practical applications of radio-therapy) will be under the direction of the Pasteur Institute. On a neighbouring site an extensive institute of chemistry is to be erected at the joint cost of the State, the City of Paris, and the Paris University. The plans, drawn up by M. Nénot, architect of the new Sorbonne (Faculty of Sciences), have just been approved by the Municipal Council, and work is to commence next spring.

THE AFTERMATH OF THE FLOOD.—The question of the disinfection of the flooded premises has been seriously occupying the attention of the authorities in Paris and the neighbourhood. Some 150 tons of sulphate of iron, chloride of lime, hypochlorite of soda and quicklime have been delivered in the various districts that were flooded. This is only a beginning, and further distributions will be made as occasion requires. Arrangements have been made for doctors or sanitary inspectors to visit all houses where typhoid fever cases may break out during the next two months, and to give special attention to the patients and the premises. The premises of butchers, porkbutchers, and all shops where foodstuffs are sold are to be inspected, and all damaged or defective food will be rigorously seized and destroyed. The popular energetic Prefect of Police in Paris, M. Lepine, has organised the service of disinfection in an admirable way. Amongst many other measures, chemists attached to the Paris Municipal Laboratory have been sent to the various districts to act in an advisory capacity. The combined steps taken for the prevention of an epidemic in any form have so far been entirely successful. They have satisfied public opinion and inspired confidence.

The exports of "balsams" (mostly tolu) from Cartagena during 1908 amounted to 60,700 lb. (2,2057.), against 75,360 lb. (3,0877.) in 1907 and 34,169 lb. (1,2617.) in 1906.

Australasian News.

"The Chemist and Druggist" is regularly supplied by order to all the members of eight Societies of Chemists in Australia and New Zealand.

New South Wales.

THE DENTISTS' AMENDMENT BILL, to which reference was made in the *C. & D.*, January 22, p. 101, has passed through all its stages in the Legislative Assembly. Some very severe comments were made on the way the Dentists' Board have carried out their duties under the old Act.

ARMY MEDICAL CORPS RESERVE.—As a result of the circular issued by the Pharmaceutical Society of New South Wales inviting pharmacists and assistants to place their names on the reserve list of the Australian Army Medical Corps, many applications were received. Thirteen pharmacists have obtained appointments as honorary lieutenants, and their names have been duly gazetted.

WAGES BOARD.—On December 13 the Secretary of the Shop Assistants' Union applied for a wages board for all employes in warehouses selling patent medicines. The wholesale houses, Messrs. Elliott Bros., Australian Drug Co., Chas. Markell, Sayers Allport Pty., Ltd., Potter & Birks, Burroughs Wellcome & Co., and Parke, Davis & Co., were represented by Mr. Wegg Horne, and W. H. Soul Pattinson & Co., Ltd., by Mr. Reynolds. The Judge held, after discussion, that "shop" meant a place where retail sales were conducted, so that wholesale establishments are outside the scope of the Act. The application was dismissed.

New Zealand.

PHARMACY AS PLACE-NAME.—At the Dunedin City Police Court on December 1, Thomas Ridley Scott was charged with having exhibited a sign "Scott's Pharmacy," thereby holding himself out to be, or implying that he was, a registered chemist. Mr. Scott carried on business as a chemist and druggist under the management of a qualified chemist. The case was very well argued on both sides, and the Magistrate gave his considered judgment on December 22. He held that the use of the words as the description of the place could not be held to convey a description of the person occupying the place. He dismissed the information. The Pharmacy Board, who were the prosecutors, will appeal against the decision.

Queensland.

PHARMACEUTICAL EDUCATION.—In the report of Mr. R. C. Cowley, Director of the College of Pharmacy, Brisbane, it is stated that it would be better for apprentices to have their college training early instead of late in their apprenticeship. The Intermediate examination in Queensland has not had the effect desired of getting apprentices to begin their studies immediately after they have been indentured.

NURSES' PRICES.—The practice of some nurses who obtain druggists' sundries at trade price and supply to their patients at the same price has been investigated by the Queensland Business Committee. The consequence has been that the Trained Nurses' Association have sent out a circular appealing to the sense of honesty and fairness of nurses to treat chemists in the same liberal way that they themselves are treated by chemists.

QUEENSLAND ARROWROOT.—The "Brisbane Courier" mentioned recently that 40*l.* per ton had been paid for Queensland arrowroot. West India arrowroot could be landed in Sydney or Melbourne at from 32*l.* to 33*l.* per ton. Not so many years ago Queensland arrowroot could hardly be sold at 15*l.* or less per ton, and it was then stated that the West India article, being mentioned in the British Pharmacopoeia was preferred for medical purposes. It is now some years since the West India arrowroot was mentioned in the Pharmacopoeia, and it is seldom handled by the Queensland wholesale druggists. It is claimed that the value of the Queensland arrowroot has been steadily increasing since attention was drawn to its utility in the laundry for clear-starching, and confectioners are stated to have found it superior to West India arrowroot for certain kinds of confectionery.

South Australia.

THE MEDICAL ACT AMENDMENT BILL was introduced into the House of Assembly on December 15. The discussion was adjourned till December 16. The intention of the measure is to give medical practitioners a monopoly. No definition of medical or surgical practice is given, leaving the Courts to decide in each case. All medical practitioners or pharmacists now on the register will be placed on the new register without examination, payment of fees, or the necessity for re-registration. Part I. of the measure deals with medicine and surgery; Part II. with dentistry; Part III. with pharmacy; Part IV. with midwives; Part V. with nurses; and Part VI. with masseurs. In drafting Part III. of the Bill, dealing with pharmacy, a number of amendments of the Pharmacy Act suggested by a committee of pharmaceutical chemists have been embodied.

South African News.

(From the "C. & D." Correspondents.)

"The Chemist and Druggist" is regularly supplied by order to all the members of the seven Societies and Associations of Chemists in business in British South Africa.

Cape Colony.

REGISTRATION.—The Colonial Secretary, upon the recommendation of the Colonial Pharmacy Board, has issued a licence authorising Mr. Robert Alexander (Minor Certificate of Great Britain) to practise as a chemist and druggist in Cape Colony.

UNSTAMPED MEDICINES.—The first cases taken under the Amended Stamps Act of 1909 were heard in Cape Town on January 14. A departmental manager of Messrs. Stuttaford & Co., drapers, Adderley Street, Cape Town, was charged with exposing for sale cuticura soap, vaseline, and Johnson's baby-powder, unstamped. Defendant said he was not aware the baby-powder had to be stamped, while the vaseline and soap were exposed unstamped through the carelessness of an assistant. Sub-Inspector Butler, who conducted the prosecution, said that as this was the first case of the kind he would not press for a heavy penalty. A fine of 10s. was imposed.—At the same court Mr. W. H. Rohm, chemist, Caledon Street, Cape Town, was charged with exposing for sale Johnson's baby-powder unstamped. For the defence it was contended that the goods were not exposed for sale, and the section of the Act allowing for articles "for dispensing and storing" to be unstamped was pleaded. Cross-examination elicited that the packets could be seen by anybody entering the shop, and the magistrate imposed a fine of 10s.—No penalty was imposed in the case of Hernan Meyer, a tobacconist, who was summoned for exposing unstamped "Blue Seal" vaseline at his shop in Long Street, Cape Town. Defendant told the magistrate that he was under the impression that he had returned to the wholesalers all articles that required to be stamped under the Act.

Natal.

WE ARE NOT SEVEN.—At the quarterly chemists' and druggists' final examination held in Maritzburg, on January 13, out of seven candidates who presented themselves for examination two passed.

Orange River Colony.

BEEWAX AND HONEY.—The regulations governing the importation of beeswax into the Orange River Colony (which were published in the *C. & D.* of October 9, 1909) have been amended to include honey. The essential parts are:—

The introduction of honey, used bee-hives and used bee-hive accessories or appliances or any other article or thing which has been used to contain or manipulate bees or beeswax is absolutely prohibited.

The introduction of beeswax and foundation-comb is absolutely prohibited, save and except under written permission obtained from the Director of Agriculture and subject to the production, in the case of each consignment, of sworn declarations, in accordance with one or both forms set forth in the Annexures contained in the Schedule hereto, as the case may require.

Provision is made for inter-colonial trade in wax, honey,

and other articles specified which do not come within the prohibition.

PROPOSED CONFERENCE.—The monthly meeting of the Orange River Colony Medical and Pharmacy Council was held in Bloemfontein on January 14, when Mr. S. S. Hewitt and Mr. W. B. Jeffreys, with four medical members and one dental member, were present. The secretary reported that the deputation appointed to interview the Premier on the subject of a medical and pharmaceutical conference was received by him on January 4, but it was found impossible to obtain any active support from the Government. Mr. Streeten's report showed that on Dr. Ward explaining the history of the movement and expressing the desire of the council for Government recognition and pecuniary assistance for the proposed conference, the Colonial Secretary stated that he could promise no recognition or funds. He said that certain of the most pressing important questions, including medical registration, etc., had been noted for consideration by the Union Government at the earliest possible date, and that he understood commissions would be appointed to guide the Government in drafting the Bills for submission to Parliament. The medical congress, which would be sitting at Cape Town when the first Parliament met, could give their opinion on any draft Bill which might result from the introduction of the question. As regards the pharmaceutical side of the question, Mr. Fischer was not aware that had been considered, but promised to do his utmost to further the interests of chemists, as it was pointed out to him that no reciprocity exists in South Africa at present with regard to the qualification of chemist and druggist granted in the various Colonies. After some discussion it was agreed that the council should approach the other medical councils and pharmacy boards with a view to some other Government taking up the question, and, failing this, that a medical and pharmaceutical conference be arranged privately, and in such case it was hoped that the medical and pharmaceutical societies would assist financially. Two candidates having applied for examination in February, the board of examiners which sat in August last was re-appointed. At this meeting an agitation, having for its object the restraining of doctors from performing dental work other than extractions and temporary dressings, culminated in the matter being withdrawn by the dental member, as the medical men in the Colony had expressed themselves overwhelmingly against any such curtailment of the privileges granted to them by their medical diplomas.

Transvaal.

A COMPLIMENTARY SMOKING CONCERT was held in the Trocadero, Johannesburg, on the evening of Thursday, January 13, by the chemists and friends of Mr. S. M. Hendry, who is about to leave the Rand. Mr. Johnston (President of the Pharmaceutical Society) presided over a gathering of about seventy. An excellent programme of music was gone through, chiefly contributed by local chemists. During the evening the chairman presented a case of pipes to Mr. Hendry, subscribed for by a few friends, and in a short speech remarked upon the good work he (Mr. Hendry) had done during the two years he had been hon. secretary of the Pharmaceutical Society. They all joined in wishing him success and prosperity in his new sphere. Mr. Hendry thanked those present for the honour they had done him, and said that, although the Society's work had occupied a good deal of his spare time, it had been the means of his making many friends among the chemists, and, besides, he thought he had only done his duty in taking an active part in the affairs of the Society. [Mr. Hendry served his apprenticeship with Mr. G. Coutts, Broad Street, Aberdeen, and afterwards came to London. About five years ago he went out to Johannesburg to Lennon, Ltd., and is now being sent by that firm to their head department at Port Elizabeth, Cape Colony.]

THE ALMANACK issued by Mr. W. J. Shepperd, pharmacist, 65 Boutport Street, Barnstaple, this year contains a directory of the town. As it is the first time a local directory has been published, the work of compilation was naturally heavy. Articles are also given on "The Animals of the District," "Progress and the Goal," and "What is Spirit?" A good deal of local information is included, and a full list of Mr. Shepperd's specialities.

Colonial and Foreign News.

SALE OF POISONS IN MYSORE.—The Mysore Legislature referred a Bill for "regulating the sale and possession of poisons," to a Select Committee on January 13.

PATENT-MEDICINE REVENUE.—In 1908 the yield of revenue in Japan from the patent-medicine tax was 2,302,603 yen (about 230,260*l.*), as against 2,192,000 yen (about 219,200*l.*) in 1907; the number of licences granted being 68,828 against 62,820 in 1907.

QUININE IN BRITISH GUIANA.—Quinine is now sold at the district post-offices all over the Colony at cost-price, and its use is steadily increasing. In 1907-8 some 1,211 oz. was thus sold, while during 1908-9 the sales rose to 2,076 oz. Steps have been taken to procure the drug put up in chocolate and comfits, with a view to increasing the consumption among children.

BUSINESS CHANGES.—Mr. Herbert, of Ling, chemist and druggist, has purchased the business of Messrs. A. Watson & Co., Ltd., at the Hong-kong Dispensary, Hankow, and will continue it as the Hankow Dispensary.—Mr. Fred E. Cornell has purchased the interests of his partner, Mr. Wm. Sillig, in the business of Messrs. Cornell & Sillig, at 61 St. Sulpice Street, Montreal. The business will be continued under the style of F. E. Cornell & Co.

PRICES OF PROPRIETARIES IN GERMANY.—With the object of securing for apothekers the same profits on proprietary medicines as are assured by the terms of the State pharmacy prices, the Apotheker Verein is compiling a price-list of specialities obtainable only at pharmacies, viz., 60 per cent. on sales of proprietaries. A number of manufacturers both in Germany and France have been approached by a committee appointed by the Verein, and have given favourable replies.

A DENTIST'S ORDINANCE.—Among the Ordinances passed in British Guiana last year was one relating to dentists. This was to some extent based on the Dentists Act, 1878 (41 & 42 Vict., c. 33), and provides for the registration of dentists, in the same way as medical practitioners. No person may call himself by the title of dentist, or any similar title, unless registered, under a penalty, and no person not registered can recover fees. The qualifications for registration are, being registered in England, the possession of a diploma granted by any body either in a British possession or a foreign country which the Medical Board of the Colony recognises as a guarantee of fitness, or being at the commencement of the Ordinance in actual practice as a dentist in the Colony.

GERMAN APOTHEKERS claim to have scored the first victory in their fight with manufacturers of pharmaceutical and chemical preparations. It will be remembered that the former have repeatedly complained of the inroads made upon their profits from prescription-work in consequence of the growing habit of manufacturers of placing their preparations on the market ready-packed for use, especially in the shape of tablets, and urging the doctors to prescribe such preparations in "original packages." Another point has been the custom adopted by manufacturers of supplying doctors direct with their new synthetic preparations for experimental purposes. As physicians in Germany are only permitted to use remedies obtained from a pharmacy, and to administer them to their patients in the case of urgency, it is practically illegal for a doctor to present his patients with any remedies for their own use. The Saxony Minister of the Interior has now issued a decree stating that it is not permissible, and constitutes an offence, if other persons than pharmacists in business supply or send to doctors remedies, medicinal preparations, or drugs; or if doctors on their part supply persons either in health or sickness with remedies, etc., not obtained from a pharmacy. This precludes the sending of samples direct by manufacturers to doctors in Saxony, and British and American firms would do well to make a note of this decree. A decree to the same effect has also been issued in Wurtemberg, and it is likely will be followed by other States.

Legal Reports.

High Court Cases.

[Unless where otherwise stated the actions are in the High Courts of Justice, London.]

DENTAL NEGLIGENCE.

In the Court of Session, Edinburgh, on February 4, the judges of the second division gave judgment through Lord Dundas in the appeal by the Hygienic Institute, Coatbridge, against the decisions of the Sheriffs awarding Mrs. B. C. Dickson, Airdrie, 50*l.* as damages for injuries which she had sustained in a teeth-extracting operation executed by an employee of the Institute (*C. & D.*, 1909, 11., 490). Lord Dundas said the question was whether or not the actings of the respondents, or their employee, came up to the professions made by them to the plaintiff. It was quite idle for the respondents to say that the order form embodying what they held out to the plaintiff merely represented them as makers of artificial teeth and not as dentists. It was plain that they also held out themselves and their assistants as extractors of teeth and practisers of dentistry. The lump sum to be paid by the plaintiff included the extraction of her teeth, and she was entitled to expect that the respondents' employee could perform the necessary dental operations with ordinary success, care, and prudence. He held that the respondents' actings fell short of their contractual professions. There seemed no doubt that the bone and flesh were torn away from the plaintiff's upper jaw with serious and distressing consequences, and it was plain that the operation was a grossly careless one.

NATIONAL CASH REGISTERS.

The National Cash Register, Ltd., were the defendants in an action brought by Mr. John R. Riley, tobacconist, Accrington, for damages for alleged misrepresentation and breach of contract, the hearing of which was commenced by Mr. Justice Ridley and a special jury in the King's Bench Division on Tuesday, February 8, and finished on the following day, with a verdict for the defendants, a case for the jury not being established. Mr. H. E. Duke, K.C., M.P., with Mr. Macnaughten, were for the plaintiff; while Mr. Rufus Isaacs, K.C., M.P., Mr. Montague Lush, K.C., Mr. Albert Profumo, and Mr. G. H. Head represented the defendants.

It was stated that the action was originally brought in the Accrington County Court, but, being regarded as of a very important character, an order was made for the trial to be conducted in London.

Mr. Macnaughten informed the jury that the plaintiff sued to recover damages for misrepresentation and breach of contract. Defendants traversed the whole of the allegations, and counterclaimed for 7*l.*

Mr. Duke, K.C., explained that plaintiff bought a cash register, and, being dissatisfied, wanted 36*l.* back, according to defendants' contract. The registers in question were sold under a variety of patents by an American company, and the English representation was by the National Cash Register, Ltd. The reason why the defendants desired the case to be heard in London was that apparently the whole of their dealings and those of their agents formed a carefully planned system, which appeared to be one by which a person became the possessor of a cash register upon terms which there was no intense desire on defendants' part that he should understand. Firstly, the plaintiff had a register valued at 10*l.*, which he found was of no use to him; then he purchased a 20*l.* one, which the agent told him he thought he would find would not be of any use to him; and eventually he became the possessor of one at 43*l.* It was strange that in each case plaintiff signed his order form at the agent's request when he was busy—in fact, the first time the form was presented he was about to leave in a railway train. He was told that the register was and always would be valued at 43*l.*, and that after three years defendants would repurchase it for 35*l.*, or in five years for 25*l.* Those statements were not true. Those representations were made in July 1903, and at that time defendants themselves decided to reduce the price of their machines. Now they said to plaintiff, "You

are only a hire-purchaser, and still owe us 7*l.*," and he understood at once why it was that the salesman visited him at times when he was very busy. Defendants, continued Mr. Duke, had a school for agents, in which the men were instructed, and he would read the Court a few passages from the literature, a mass of which was placed in the hands of the men. This showed the way to overcome the natural reluctance of the British tradesman to purchase the register. (Laughter.)

His Lordship: It would be useful for electioneering. (Laughter.)

Mr. Duke: Here is one passage:

"Begin with the cheapest and work up to the highest-priced one."

That was given much better in the 1904 manual, in which there was a much more elaborate direction on the subject. It ran:

"Sell something better; do not attempt to close down a sale at your first interview. If the merchant says he wants a cash-register and is willing to sign an order for it, take his order and his money, but remember your duty is not done until you have taken him into your office, made a demonstration, and sold something better." (Laughter.)

There was, you see, continued Mr. Duke, to be a systematic advance, and in the present case that advance was beautifully carried through. Plaintiff believed he could always get his price for the machine, being told that the register was protected by a number of valuable patents, and he signed what he believed to be an order form, paying so much down and so much a month, the register to be his property from that time. Since then he found that the machine was not sold at a stereotyped price, and that he could not get the price which it was said he would be able to get for it. Another instruction was:

"Your form should be made out as much as possible in advance, so that there shall be no delay when the buyer has made up his mind." (Laughter.)

Such a form was presented to plaintiff, who, when he found out his mistake, requested the defendants to carry out their contract and purchase the thing back, but defendants refused.

The hearing at this stage was adjourned, and was resumed on Wednesday, when Mr. J. R. Riley, the plaintiff, gave evidence as to how Mr. Falkner, one of the defendant company's agents, got the order from him. The evidence bore out counsel's opening statement in this regard, and was somewhat amusing. For instance, witness visited the agent's show-room by invitation, and saw ten or a dozen registers, which he said were far too expensive for him. Witness was going away on his holidays, and went to the railway station, accompanied by the agent, who even got into the train with him, still trying to sell the machine. (Laughter.) The train went off and the agent travelled with plaintiff as far as Blackburn, where he alighted. At last plaintiff yielded to the man's persuasions and decided to buy a ten-guinea machine. The agent at once presented to him what he said was an order form. It was doubled up and placed on a periodical, and the agent said, "Sign just there." (Laughter.) No mention was made of the fact that the form was a hire-purchase agreement; in fact, nothing was said about hire-purchase. Just as he signed the note the train moved off, and plaintiff enjoyed his holiday at Blackpool.

His Lordship (reading the form signed by plaintiff): It is in such small print that I don't see how a man could read it at Blackburn. It is a hire-purchase agreement, however. His Lordship remarked later, while witness was telling how he felt pestered by the agent, "All the pestering of the agent will not constitute fraud, you know."

Mr. Colin J. Sabiston, of Muswell Hill, a district manager of Messrs. Pooley & Sons, said he was at one time an agent for the defendant company, and attended their school. In the course of his training he was told to say that the monopoly of the cash register was with the company, who sold 96 per cent. of the machines in the civilised world; that they never had and never would reduce their prices, and the registers after ten years' wear would fetch half the original price. After a time it was suggested that the price should be reduced, and he understood

that the managing director objected to the reduction on the ground that it was not necessary, and also that it would be a breach of faith to customers who had purchased machines at the high prices.

Mr. Rufus Isaacs argued that there was no case to go to the jury. The company bound themselves, he said, by a written contract, which plaintiff had signed, and therefore he could not succeed.

Mr. Macnaughten contended that the representation of facts by defendants' agent were untrue to defendants' knowledge, and, seeing that by such misrepresentations the plaintiff was induced to purchase the article, the contract could not stand.

His Lordship said that if the fact that plaintiff was induced to buy the machine because he was told he could always get 35*l.* for it was relied upon he did not think there was sufficient case to go to the jury.

Eventually his Lordship entered judgment for the defendants, with costs, holding that there was no case to go to the jury.

THE MUTUAL GABLE.

The Second Division of the Court of Session, Edinburgh, consisting of the Lord Justice-Clerk and Lords Ardwall and Dundas, on February 3, decided two appeals in which a chemist and druggist and a doctor of Linlithgow were the litigants, viz., Mrs. C. M. Spence, 131 and 133 High Street, Linlithgow, and Dr. R. B. Thom, 129 High Street, the gable wall between the properties being the subject of the dispute. Mrs. Spence says it is mutual, Dr. Thom says it is his, and Mrs. Spence took action before Lord Skerrington and lost. This decision the Second Division has now reversed. The second action was instituted before the local Sheriff by the doctor to establish his position as to making a doorway in the No. 131 property. This also Mrs. Spence has won. In the first case Lord Dundas said "It was a somewhat deplorable case, a dispute between two neighbours about legal rights which at the best could not possess much importance or any considerable pecuniary value."

SOYA-BEAN MEAL.

The question as to whether soya-bean meal is injurious to cattle was raised in the Court of Session last week, before Lord Mackenzie, in the case of Blake v. Lawson, where a dairyman sued a firm of millers for 700*l.* damages in respect to the death of twenty-five cows, alleged to be due to soya-bean meal supplied by the latter. The evidence was largely scientific. The pursuer's case was that death was due to irritant poison contained in the meal (hydrocyanic acid); the defence averred that overfeeding was the cause of death. Among the witnesses for the defence was Mr. J. Hendrick, B.Sc., who stated that he examined a sample of the soya-bean meal by two different methods for hydrocyanic acid and for cyanogenetic glucosides, but found none. Principal Dewar, of the Royal (Dick) Veterinary College, was of the opinion that death was due to feeding with decomposing potatoes. Dr. T. W. Drinkwater, F.I.C., examined nine samples of meal for glucoside, equal to prussic acid, and found 0.002, 0.0018, 0.001, 0.001, nil, nil, 0.0013, 0.0017, 0.0016, and one taken by the official sampler contained 0.0017 glucoside, equivalent to 0.119 grain per lb. Its presence could be detected only by a delicate process, which he believed brought out too high results—owing to the high percentage of oil—to the extent of 0.006. Professor G. H. Gemmell, F.I.C., stated that he did not get any evidence of cyanogen in any of the nine samples. He considered that the Imperial Institute method, used by Dr. Drinkwater, was an over-estimation of the quantity. In cross-examination this witness stated that there was a quite distinct smell in the meal like bitter almonds.

Medicine-stamp Act, 1812.

NO LICENCE TO SELL.

At Willesden on February 4, Frederick G. Turner, chemist, Kilburn, was summoned at the instance of the Board of Customs and Excise for selling medicines subject to stamp duty without having a licence. Defendant, who had been warned by the Revenue officials and previously fined, was now ordered to pay a fine of 20*s.* and costs. The same defendant was at Marylebone Police Court on January 28, fined 25*s.* and costs on three summonses for selling

a dutiable medicine (Dr. Cole's cooling and teething powders) without a licence and for selling headache and neuralgia pills and Dr. Cole's pills for ladies untamped.

County Court Case.

ALLEGED NEGLIGENCE IN DENTAL OPERATIONS.

At the Accrington County Court, on February 3, Ellen Brereton claimed 20*l.* damages against Messrs. Entwistle & Sons, dentists, Blackburn Road, alleging negligence in extracting a tooth. Before the case opened, the Judge said it was not a good thing for professional people to discuss matters of that kind in a public court. If it could be settled without any admission as to negligence it would be better. Plaintiff ought to be reasonable. The very best dentist sometimes left a bit of tooth in the patient's mouth, and the tenderness of the patient's jaw was not always known to a dentist. An action of that kind ought to be dealt with reasonably. The patient had not been permanently injured—she had not lost a husband or anything of that sort through disfigurement. Plaintiff would have to prove negligence, and if the dentist took reasonable precautions there could be no damage. Deliberate negligence or unskillfulness would have to be proved. He suggested the solicitors should arrive at a settlement. This was done, and, on terms suggested by his Honour, imputations of negligence or lack of skill were unreservedly withdrawn.

Bankruptcy Reports.

Re Robert Hardman, 2*a* Cateaton Street, Bury, Lancs. Pill and Ointment Maker.—At Bolton Bankruptcy Court on February 3 this debtor's examination was closed. No fresh information was elicited (*C. & D.*, January 29, p. 140).

Re W. Caudery & Co. (Richard Bennett Jane, trading as), 1 Fenchurch Street, E.C., Merchants and Agents.—A sitting of the London Bankruptcy Court was appointed to be held on February 9, before Mr. Registrar Gifford, for the public examination of this debtor, against whom a receiving order was made on January 4 at the instance of *Chemische Fabrik vorm. Goldenberg Geromont & Cie.*, the act of bankruptcy alleged being notice by the debtor of suspension of payment. At the first meeting of creditors proofs of debt to the amount of 146,287*l.* were dealt with by the Chairman, and a resolution was passed for Mr. F. J. Young, C.A., to wind up the estate in bankruptcy as trustee, with the assistance of a committee of inspection. Mr. W. P. Bower, Assistant Receiver, reported that the debtor had not filed his statement of affairs, but expected to have it completed within a week. It was a heavy case, and the inquiry would take some considerable time. By consent of all parties the sitting was adjourned until March 16.

Gazette.

Partnerships Dissolved.

FISHER, G. H. and BOULD, F. E., Clown, Derbyshire, chemists, etc., under the style of Fisher, Bould & Co.

THOMPSON, C. G., and FAWSETT, F. W., High Road, Tottenham, and Fore Street, Upper Edmonton, London, N., general medical practitioners, under the style of Drs. Gurney Thompson & Fawcett.

The Bankruptcy Acts, 1883 and 1890.

ADJUDICATIONS.

BURROWS, WALTER WILLIAM, Cheltenham, surgeon-dentist.

ELWICK, THOMAS HENRY, Nottingham, late Beeston, Notts, drug-store keeper.

KENNY, WALLACE ROBERT (trading as Hill & Co.), Norwich, confectioner and baking-powder manufacturer.

PHILLIPS, HUBERT WILBERFORCE, Bowdon, Cheshire, physician and surgeon.

HAZELL'S GUIDE TO THE NEW HOUSE OF COMMONS, a six-penny publication produced by Messrs. Hazell, Watson & Viney, Ltd., is a revision of a feature which appears annually in "Hazell's Annual." It has been rendered necessary by the recent Parliamentary elections. An introduction sketches the causes and effect of the elections, and then follows biographies of the members elected and a list of constituencies. It is a very useful booklet to those who take an interest in national politics.

New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

WALTER BRIGHTS, LTD. (P.C.).—Registered in Dublin. Capital 3,000*l.*, in 1*l.* shares. Objects: To take over the business of J. Shanks & Co., Ltd., manufacturers of aerated, mineral, and artificial waters and cordials, brewers of hop bitters, &c.

DURON CO., LTD. (P.C.).—Capital 6,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers of and dealers in emulsions of oils, fats, and the like, for use in the textile industries, chemical manufactures, drysalts, etc. The first directors are Dr. C. Schutte, C. F. Becker, Dr. P. Spiess, C. Moeller, and H. Moeller.

BRITANNIC LABORATORIES, LTD. (P.C.).—Capital 100*l.* in 1*l.* shares. Objects: To carry on the business of manufacturing, wholesale, dispensing, and general chemists, druggists, pharmacists, etc. The first directors are A. S. Fryer, 3 Ashbourne Avenue, Bridlington, chemist, and A. Fryer, 135 Spencer Place, Leeds, druggist (both permanent). Qualification, 5*l.*

BICHARA DE PARIS (ENGLAND), LTD. (P.C.).—Capital 100*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers of and dealers in all kinds of perfumery and toilet requisites, court hairdressers, chemists and druggists, etc., and to enter into a contract with Mrs. A. Hodgson, being a transfer to the company of her interest under an agreement with Bichara Malhame. The first directors are Annie Hodgson and Frances Pickles. R.O., Egyptian House, 170 Piccadilly, W.

BEDELLS, LTD. (P.C.).—Capital 100*l.*, in 1*l.* shares. Objects: To take over the business of a chemist and druggist and maker of sarsaparilla and other articles carried on at 78 Chatsworth Road, Lower Clapton, as "Arthur Bedells," and to adopt an agreement with Martha Dellow. The first subscribers are: Martha Dellow, 73 Chatsworth Road, Lower Clapton; J. Swain, chemist; E. J. H. Scotton, salesman; H. J. Dellow, cellarman; Mrs. J. E. Watford; Mrs. J. T. Swain; and P. Watford, clerk.

NATIONAL DENTAL CORPORATION, LTD.—Registered with 1,000 members, each liable for one guinea in the event of winding-up. Objects: To unify the profession of dental practitioners, to promote dental legislation, to establish schools of dental technology, to protect the interests of all *bona fide* dental practitioners, registered and unregistered, etc. The first subscribers are: A. T. Scott, L.D.S., R.C.S.I.; E. B. White, D.D.S.; S. G. McCormick, D.D.S.; S. V. Brook, M.P.S.; G. Houlson, dental operator; M. Nadel, D.D.S. (Russia); and J. H. Manning, dental operator. The management is vested in a council, the first members of which are the above. R.O., 31 Castle Street East, Oxford Street, W.

Company News.

PRICE'S PATENT CANDLE, LTD.—The directors recommend a dividend of 1*l.* per share.

BRITISH LYSOFORM CO., LTD.—The company to be voluntarily wound up. Liquidator, Mr. Robertson Lawson, 34 Old Broad Street. Meeting of creditors at above address on February 17, at 11.30 A.M.

R. WHITE & SONS, LTD.—At a special meeting held at Cannon Street Hotel, London, E.C., on February 7, a resolution in favour of reconstructing the company was passed unanimously. (*C. & D.*, January 29, p. 152.)

BRITISH LIQOZONE CO., LTD.—This company has been voluntarily wound up "on purely personal grounds," but the business is being continued under the present management at 60 Wilson Street, Finsbury, London, E.C., as the British Liquezone Co.

J. SHANKS & CO., LTD. (Dublin).—A notice of the appointment of R. M. Leechman, of 19 Belmont Terrace, Donnybrook, Co. Dublin, as receiver or manager on February 1, 1910, under powers contained in debentures dated February 5, 1898, has been filed.

MORTGAGES AND CHARGES.—Particulars of the following have been filed: *H. K. Carver & Co., Ltd.* Mortgage debenture to secure 100*l.* Holder: W. Holt, 68 Bute Street, Cardiff.—*Williams' Borough Pharmacy, Ltd.* Particulars of 1,000*l.* debentures created January 7, 1910, and now issued.—*Bradley & Bliss, Ltd.* Mortgage on 4 and 6 London Street, Reading, dated January 28, 1910, to secure all moneys due or to become due from the company to J. & C. Simonds & Co., Reading, not exceeding 1,000*l.*

Business Changes.

Notes for this section must not be in the nature of advertisements, and they should be authenticated when sent to the Editor.

BOOTS LTD. are opening shortly in Dartmouth Road, Forest Hill, London, S.E.

MR. J. W. MAINPRIZE, chemist and druggist, has removed his business from 19 to 35 Kirkgate, Otley.

MR. FRANKLIN, chemist, has purchased the business of Mr. A. T. Mackenzie, 86 High Street, Southall, Middlesex.

MR. E. DAWSON, chemist and druggist, late of Tufnell Park, London, N., has opened a pharmacy at Pittshanger Lane, Ealing, W.

MR. BEN L. BURRELL, pharmaceutical chemist, has disposed of his business at 13 Rustlings Road, Sheffield, to Mr. W. E. Coultas.

MR. D. A. BRYAN, chemist and druggist, Manchester, has bought the business of Messrs. Kemp & Brook, chemists, 7 Eign Street, Hereford.

MESSRS. HENRY C. QUELCH & Co., Ludgate Square, London, E.C., have appointed Mr. J. F. Lintott to represent them, in place of Mr. F. R. Lockwood, whose connection with the firm has ceased.

MR. F. E. BOULD, chemist and druggist, is continuing the business of Fisher, Bould & Co., Coronation Buildings, Clown (Derbyshire), in his own name, his partner, Mr. Geo. Henry Fisher, having retired from the firm.

Liverpool Apothecaries' Hall.

Some time ago Messrs. Symes & Co., Ltd., Liverpool, purchased from the Liverpool Apothecaries' Co., Ltd., the business which they had carried on at the Apothecaries' Hall, Colquitt Street, since 1838. Up to the present the business has been continued under the same style, but Messrs. Symes now announce their intention to remove the retail business to their other pharmacies, two of which are near by, and they are letting the Hall to the Richmond Gas Stove and Meter Co., retaining only the laboratory and other parts of the building necessary for the manufacture of their preparations. The Hall is a noble building and figures in the "Annals of Liverpool."

The Liverpool Apothecaries' Co., Ltd., was instituted in 1836 with a nominal capital of 100,000*l.*, of which 56,000*l.* was paid up at the commencement. The buildings consisted of a handsome hall, extensive laboratory, still-room, and laboratory-shed, with a large warehouse of five floors, and mills, now known as the Cambrian Mills, in a separate building. The company did, besides the retail and dispensing business, a wholesale trade in the North of England, Scotland, and Ireland, and some shipping and export. In June 1849, when Mr. Jacob Bell addressed a meeting of Liverpool chemists, with a view to forming a branch of the Pharmaceutical Society there, he referred, in the course of his remarks, to the Apothecaries' Hall as being founded on a pretext that there were not sufficient qualified chemists to supply the public with reliable medicines. He criticised the institution so severely that Dr. Anderson, the managing director, wrote a long and spirited letter in reply, and certainly got the best of the argument, inasmuch as Mr. Bell had given as a reason for chemists uniting that there was far too much ignorance among them.

Both Mr. Clay and the late Mr. Abraham, founders of the well-known business bearing their names, were either assistants or managers at the Apothecaries' Hall before commencing business on their own account. The business at one time belonged to the Apothecaries' Co., of Berners Street, London. Later Messrs. Overton and Hewgill, together with Mr. Roberts, of Manchester, carried it on for five years, at the end of which time it reverted to the Apothecaries Co., Ltd. Finally it was purchased by Messrs. Symes & Co., the Apothecaries' Co., Ltd., liquidating their affairs and ceasing to trade in Liverpool. During the hearing of the case *Pharmaceutical Society v. London and Provincial Supply Association*, the Liverpool Apothecaries' Co., Ltd., was quoted by the defence as evidence that a limited company did exist for the purposes of pharmacy before the Pharmacy Acts.

EDMONDS (RAMSGATE) MINERAL WATER CO., LTD. (P.C.).—Capital 1,500*l.*, in 1*l.* shares. Objects: To take over the business of G. Edmonds, mineral-water manufacturer, Ramsgate. The first directors are G. Edmonds (managing director) and P. C. Edmonds. R.O., 34 Harbour Street, Ramsgate.

Birth.

GALE.—At Hermann Villa, Acutt Street, Durban, on January 13, the wife of R. P. Gale, chemist, of a son.

Marriages.

GILL—CARGILL.—At Khartoum, on January 24, by the Rev. Mr. Thom, Ernest W. Gill, bridge engineer, of Thornaby-on-Tees, to Daisy Cargill, chemist and druggist, daughter of the late Captain D. W. Cargill and Mrs. Cargill, Hillend Road, Arbroath.

HODGSON—HARTLEY.—At Emmanuel Congregational Church, East Dulwich, London, S.E., on February 3, by the Rev. R. Kirkpatrick, John William Hodgson, chemist and druggist, Leyton, Essex, to Edie, eldest daughter of Mrs. T. Hartley, Dale Street, Lancaster.

Deaths.

CORY.—On January 20, Mr. Charles Cory, chemist and druggist, Endsleigh Gardens, London, N.W., late of 52 Wardour Street, W., aged sixty-seven.

DAVIES.—On January 17, Mr. John Tremere Davies, chemist and druggist, 150 North Road, St. Andrew's, Bristol, aged forty-eight.

DETCHON.—On February 7, suddenly, Mr. Thomas Detchon, who was in business as a chemist at 39 Cursitor Street, London, E.C.

GIBBS.—On February 3, at 19 Nutfield Road, Thornton Heath, Mr. George Gibbs, aged forty-three. Mr. Gibbs held the position of sample-room clerk to Messrs. Niemann & Co., produce brokers, 29 Mincing Lane, E.C., and had been in their employ twenty-three years. His genial disposition and readiness to oblige earned for him the highest respect in the "Lane" spice-trade.

JOHNSON.—Information was received in London by cablegram on Monday, February 7, of the death of Mr. Robert William Johnson, president of Messrs. Johnson & Johnson, plaster and surgical dressings manufacturers, New Brunswick, N.J. Messrs. John Timperon & Co., Ltd., their agents, have no particulars of the cause of death or when it actually occurred. It may be recalled that Mr. Johnson shared with the late Mr. George J. Seabury and Dr. Grosvener the distinction of pioneering the introduction of rubber plasters into pharmacy, after their invention in 1845 as Allcock's plasters. Mr. Johnson and Mr. Seabury were in partnership as Seabury & Johnson until five-and-twenty years ago, when the partnership was dissolved, Mr. Seabury continuing the old business, which was incorporated in 1885. After some time Mr. Johnson, in association with his brother, started the firm of Johnson & Johnson, erecting a splendid factory in New Brunswick, State of New Jersey, which venture has been attended by a large measure of success. Mr. Johnson was a capable pharmacist, an ingenious mechanic, and astute man of business. He was approaching the allotted span of life.

KENNEDY.—At Aberdeen, on February 3, Mr. Herbert William Kennedy, chemist and druggist, late of London, aged twenty-eight.

RYDER.—On February 4, Mr. Joseph Ryder, chemist and druggist, late of Larbert. His brother, Mr. James Gove Ryder, chemist and druggist, died on January 7. Both were Aberdeen men. Joseph passed the Minor examination in January 1905 and James in April 1906.

SCOTT.—At 82 Brunswick Street, Sheffield, on February 6, Harriett, widow of the late Mr. Walter Scott, chemist and druggist.

WOOD.—On February 6, at 145 Front Street, Arnold, Notts, Ann Rawson, widow of the late Mr. W. H. Wood, chemist, aged seventy-eight.

Trade Notes.

BOVRIL, LTD., whose headquarters are in Old Street, London, E.C., have opened a depot at 34 George Street, Hull.

MESSRS. HUGH STEVENSON & SONS, LTD., box-makers, Garratt Works, Summers Town, London, S.W., have added another telephone. Their numbers are now Wimbledon (National) 173, Battersea 157.

ARTISTIC BORDERS have become a feature of the "special position" announcements of the British Drug Houses, Ltd., London, now regularly appearing in the *C. & D.* This week B. H. & Co.'s emulsion of cod-liver oil is advertised, and life-like cod-fish form a "par excellence" frame to the "ready for retail" speciality.

MESSRS. FERRIS & CO., LTD., Bristol, inform us that a man giving the name of Smith has applied recently to several firms in London for assistance or employment, stating that he has been employed by them as a warehouseman and packer. Messrs. Ferris know nothing of this individual, and his story, so far as it relates to them, is untrue.

LADY ABERDEEN'S CLINICAL.—The Countess of Aberdeen, Vice-Regal Lodge, Dublin, sends us a specimen of the Mothers' Thermometer which has been devised by Dr. Séverin La Chapelle, of Montreal, for the use of mothers who are not sufficiently experienced to read the ordinary clinical thermometer correctly. The thermometer is large, and the scale is enclosed in a flat tube, thus keeping it free from liability to harbour germs. The opal scale has simply four graduation marks—98°, 100°, 102°, and 104°; but the valuable feature is the simple indications in red before the marking. Before 98°, for instance, is printed "Normal condition," and before 102° are the words "Doctor at once." The mercury tube is in yellow glass, thus increasing the contrast and facilitating the reading. In the directions it is impressed on the mother that the child's temperature should be taken daily during the first year of its existence; but the thermometer is equally useful for the other members of a family. Lady Aberdeen's interest in the thermometer is philanthropic, the introduction being one of the measures taken to combat the excessive infantile mortality which is unfortunately prevalent. The thermometer is sold by Mr. J. J. Hicks, 10 Hatton Garden, London, E.C., and retails at 2s.

Personalities.

Notes for this section must not be in the nature of advertisements, and they should be authenticated when sent to the Editor.

MR. ALFRED MOND, M.P., has become the proprietor of the "English Review."

MR. JAMES MCKENZIE, of the Singapore Dispensary, Ltd., expects to pay a visit to the Old Country in April.

MR. J. BERL, representing Messrs. Yardley & Co., Ltd., Carpenter's Road, Stratford, London, E., sailed for Durban on January 29.

MR. C. W. DUFFIN, Ph.C., 8 Market Place, Wakefield, has been elected on the committee of the Wakefield Tradesmen's Association.

MR. T. C. LAMB, J.P., pharmaceutical chemist, Chatham, has been elected a Vice-President of the Medway District Traders' Association.

MR. J. LAURIE, chemist and druggist, 2 Lytham Road, Blackpool, has been elected a Vice-President of the local Tradesmen's Association.

LIEUT.-COLONEL CLIFFORD PROBYN, J.P., is again contesting the Strand Ward in the forthcoming London County Council election.

MR. ERNEST O. JAMES, formerly of Yokohama, has joined the representative staff of Messrs. S. Maw, Son & Sons, 7 to 12 Aldersgate Street, London, E.C.

CAPTAIN R. MUIRHEAD COLLINS has been asked to remain in London as Chief of the Australian High Commissioner's Office, and has agreed to do so.

MR. COUNCILLOR C. E. FOX, J.P., Mayor of Bethnal Green, has accepted the position of President of the Bethnal Green Tradesmen's Cricket Club.

MR. J. A. STEWARD, chemist and druggist, 27 High Street, Worcester, has been appointed representative charity trustee for a term of three years by the Worcester City Council.

MR. C. M. W. GRIEB, B.Sc. (Lond.), F.I.C., F.C.S., has been appointed scientific adviser and analytical chemist to Messrs. R. Fry & Co., Ltd., mineral-water manufacturers, Brighton.

MR. T. CRITCHLEY, J.P., chemist and druggist, 10 King William Street, Blackburn, has been elected a member of the committee of the Blackburn Guardian Society for the Protection of Trade.

MR. J. R. BROUGH, C.C. (of Lewis & Burrows, Ltd.), the Mayor of Stoke Newington, has been elected by the Common Council as one of their representatives of the Castle Baynard Ward schools.

THE booklet issued in connection with the Bolton Parish Church bazaar, held last week, contained an interesting account of the parish church, written by Mr. W. R. Blain, pharmaceutical chemist, Bolton. Mr. Blain also published some booklets containing, in addition, photographs of various parts of the church.

MR. ALBERT CHAS. HAGON, Cardiff, son of Mr. Albert Hagon, member of the Pharmaceutical Council, was successful in passing the Final examination of the Law Society last month. Mr. A. C. Hagon is article to Messrs. Morgan, Scott & Scott, solicitors, Cardiff, and although he has only just attained his majority, he is not yet out of his articles, and his success is therefore all the more gratifying, especially as it is due to private study.

MR. F. BASCOMBE, Ph.C., F.I.C., on Saturday, February 5, presided at a smoking-concert given by the members of the Lambeth Carlton Bowling Club (of which he is captain) at the Clarence Rooms, Brixton. The large hall was crowded, and a special appeal made by the Chairman on behalf of the local charities resulted in a collection of 11l. 1s. 6d. At the installation meeting of the London Dorset Lodge of Freemasons, held at Frascati's on Monday, February 7, Mr. Bascombe was appointed Director of Ceremonies.

At the meeting of the London County Council on February 8, Mr. R. A. Robinson, ex-Chairman of the Council, was presented by his colleagues with his portrait in oils, painted by Sir William Orchardson, R.A. Sir Melvill Beachcroft, in making the presentation, said that custom had decreed that a portrait of the Chairman should hang on the Council's walls. Mr. Robinson had enjoyed the esteem and respect of both parties on the Council during his thirteen years' work as a member. He had served as Vice-Chairman of the Industrial and Reformatory Schools and the General Purposes Committees, and as Chairman of the former Committee, the Establishment Committee, and the Special Committee on New Offices. He also acted from 1901-8 as the Council's representative on the Thames Conservancy, as Deputy-Chairman of the Council in 1903-4, and as Chairman in 1908-9. He took an active part in the scheme for the new County Hall. Sir John Benn, leader of the Opposition, said that Mr. Robinson was a perfect type of the cultured business or professional man who devoted his time to the service of London. Mr. Robinson, in reply, having expressed his thanks, asked the Council to accept the portrait, and the Chairman said they would be glad to do so. [The portrait shows the head and shoulders of Mr. Robinson. The rather sombre tones are relieved by a blue tie. The expression is, if anything, a little severe; the artist has hardly caught that happy expression which is so familiar in the world of pharmacy. Perhaps the cares of office in municipal life are more trying than the work in Bloomsbury Square.]

At the London Bankruptcy Court on Thursday, February 10, George A. Gower, drug-store keeper, 899 Romford Road, E., passed his public examination in bankruptcy, as also did W. Jopling, chemist, 175 West End Lane, N.W.

Agri-Horticultural Licences.

(Poisons and Pharmacy Act, Sec. 2.)

Notice of Application.

BURNLEY.—Charles Henry Holmes, seedsman, 2 Market Square.

Consideration of Applications.

BROMLEY.—The Town Council again had before them on February 2 a copy of the local chemists' memorial to the Privy Council. The committee dealing with the matter reported that a draft reply had been prepared, which the Town Clerk read. After stating that it was a fact that four applications had been received, the names and addresses of applicants being given, the draft reply continues as follows:

In dealing with these applications, the Council gave the most careful consideration to representations made to them by the registered chemists, both in writing and verbally, by a deputation invited to attend a meeting of the committee dealing with the matter, and at the same time due regard was given to Sub-section (2) of Section 2 of the Poisons and Pharmacy Act, together with the regulations made by Order in Council, by taking into consideration whether in the neighbourhood where the applicant intended to carry on business the reasonable requirements of the public were satisfied. Careful inquiry was made as to the district to be served by each applicant, and it was apparent from information received that in each case a large number of customers habitually using the shops of the applicants for general business would give orders for delivery in outlying portions of the borough and adjoining districts, where their requirements would not be met in the ordinary course of business by the chemists, and generally it would be more convenient for the public to obtain weed-killers from the tradesmen with whom they deal for seeds, implements, etc. No objections were received from the police in connection with the applications, and in the case of three of the applicants they were residents of very long standing, and the other applicant had carried on business for some years, and in each case a considerable agency existed for the supply of weed-killers, etc. To instance the consideration given to the respective applications, it may be pointed out that periods ranging from five weeks to five months elapsed between the receipt of the application and the granting of the licence, during which time exhaustive inquiries were made by the Council. The Council were satisfied that the persons supposed to be licensed were fit persons to be entrusted with the sale of poisonous substances to be used exclusively in agriculture or horticulture. Having regard to all the circumstances, the Council came to the conclusion that in granting the applications they would be carrying out the intention of the Act, and would thus give the increased facilities contemplated when the Act was passed, and accordingly it was decided to grant licences to the four applicants as set out above.

The Council approved of this reply being sent to the Privy Council.

Inspectors and Inspection.

FOLKESTONE.—The Town Council has appointed Mr. Wm. Thos. Gostling to act as inspector under the Act for the borough.

WINCHESTER.—The Head Constable submitted on February 2 a satisfactory report to the City Council relative to his inspection of the premises licensed under the Poisons and Pharmacy Act.

Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 obtainable at Money Order Offices for £1 and lodged with Mr. Temple Fraanks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

The figures in parentheses refer to the classes in which the marks are desired.

(From the "Trade-marks Journal," February 2, 1910.)

"WASHROC"; for chemicals (1). By W. Pinchin & Co., 8 Church Street, Shoreditch, London, E. 319,391.

"BILLOWZONE," and label device; for medicinal chemicals (3). By Brooks, Dunford & Co., 58 New Bond Street, London, W. 318,360.

"SOUPLETTES"; for all goods (3 and 42). "CURDLETTES"; for all goods (42). By Evans Sons Lescher & Webb, Ltd., Liverpool and London. 318,466/7, 318,465.

"ST. JEROME"; for an embrocation (3). By W. Cawley, 73 Swallowfield Road, Charlton, London, S.E. 318,657.

Facsimile signature, "G. H. RYLATT"; for medicinal chemicals (3). By G. H. Rylatt, 1 Norwood Parade, Southall, London, S.E. 319,232.

"CYNFINO"; for medicine (3). By D. B. Kidd, 1 Exe View, Exmouth. 319,292.

"KUR-INDI"; for medicinal chemicals (3). By A. H. Gasquoine, 60 Tollington Park, London, N. 319,521.

"GALACTOVA," "LAIPTOTO," "PHOSPHOVA"; for medicinal chemicals (3). By Casein, Ltd., Culvert Works, Sheepcote Lane, London, S.W. 319,597/8/9.

"SLEEVULA"; for medicated-gauze tissue (3). By Southall Bros. & Barclay, Ltd., Birmingham. 319,738.

"SYLPH"; for all goods (8). By Société des Lunetiers, 56 Hatton Garden, London, E.C. 318,500.

"INHALIQUE"; for an inhaler (11). "VAPOLIQUE"; for an atomiser (11). By C. J. Hewlett & Son, Ltd., Charlotte Street, London, E.C. 318,964, 319,206.

More News.

MR. HOVENDEN'S LIBRARY.—On Monday and the three following days of this week the valuable library of the late Mr. Robert Hovenden, F.S.A., F.R.Hist.Soc., of Heathcote, Park Hill Road, Croydon, was sold by auction at Messrs. Puttick & Simpson's rooms, Leicester Square, London. Mr. Hovenden was senior director of Hovenden & Sons, Ltd., Berners Street, W., and City Road, E.C., and, as mentioned in our issue of November 28, 1908, was an antiquary of great repute. The extensive library of books and manuscripts was collected regardless of expense or time, and included a unique collection of Kentish topography, rare tracts, county histories, and works relating to London. The works relating to Kent occupied the whole of Tuesday, and realised upwards of 700*l.*, while it is probable that the total proceeds will exceed 3,000*l.* Pharmaceutically the library was of little interest, but few of the works having any bearing on the subject; an exception was "The Secrets of Maister Alexis of Piemont, containing excellent remedies against divers diseases, wounds, etc., with the manner to make distillations, perfumes, syringes, colours, fusions, and meltings; translated out of French into Englyshe by William Warde." This was an imperfect copy in black letter, dated 1562, and sold for 18*s.*; and "The English Physitian," Nicholas Culpeper (folio, 1652), which changed hands at 2*l.* 14*s.* As was to be expected there were many valuable, interesting, and rare works relating to hair and hair-dressing, one, "Recueil General de Coeffures de differents Gouts, 1778," selling for 1*l.* 5*s.*

A SHOP-BOY'S FALL.—On Wednesday, February 9, Mr. J. Troutbeck held an inquiry at Lambeth concerning the death of Albert A. Dallens (15), a shop-boy employed by Mr. Ordish, chemist and druggist, 85 Bedford Hill, Balham, who died in St. Thomas's Hospital. Evidence was given by his mother, who said that the boy had fallen from steps while winding the clock, and the manager gave him 2*s.* "not to tell his mother." This was denied by the manager, Frederick G. Steeds, chemist and druggist, who stated that about four weeks ago, at 12.30 P.M., he heard a tremendous noise in the shop, and, on going out, he found the boy on the floor in a crouched-up position. He did not know whether he had been using the steps. He was unable to speak for some minutes, but recovered after having some water. He asked the boy, "Have you been taking the jubes and fallen down?" He replied in the affirmative. Witness told him he was a silly boy, but he did not scold him.—The Coroner: You gave him 2*s.*?—That is absurd. It is untrue, both as regards winding the clock and my giving him 2*s.* He was stealing sweets, and fell down and hurt himself. He was probably standing on a box, which tipped up.—The Coroner: Whether he was stealing sweets or winding up the clock, if he fell, and was unable to stand or speak, did not it occur to you that he was seriously injured?—I could not leave him, could I? Beside, he seemed all right. Witness was further questioned about the 2*s.* and attention to deceased, who, according to the evidence of Dr. W. Harmans, house surgeon at St. Thomas's Hospital, died from blood-poisoning following acute hip-disease. The Coroner thought the jury would find it a little difficult to decide the case. There was, he said, no question about there having been an injury; that was not an invention. Whether he was winding up the clock or stealing sweets was not very important, as they had not to deal with the question of the employer's liability. The jury returned an open verdict.

Medical Gleanings.

Oxygen-inhalation.

DR. LEONARD HILL recently communicated to the "British Medical Journal" an illustrated description of a portable oxygen-inhaling apparatus for use in mountain-sickness. Oxylithe (of which sodium peroxide is the active ingredient) is the substance from which the oxygen is obtained by the action of water.

Ether as an Anæsthetic.

DR. W. E. ALDERSON, Newcastle, urges in the "British Medical Journal" the advantages of ether administered by the open system in dental cases where nitrous oxide alone is insufficient. Two ounces of ether is sufficient on an average to induce in ten minutes a condition of anæsthesia long enough for all dental operations. The ether is placed on a Bellamy Gardner's wire frame with two layers of lint enclosing eight layers of gauze.

Infant Feeding.

THE experiment is being tried at the Leicester Corporation Infants' Milk Depot of supplying dried milk for infant feeding. The health of the children has not been prejudiced, but as a precaution against scurvy mothers are advised to administer fresh fruit juice every other day as an antiscorbutic. At Leicester two grades of milk are used, one "full cream," containing the whole of the fat, and the other three-quarters cream used for babies under six months old. An addition of 10 per cent. of sugar is made to both grades.

Ringworm Treatment.

DR. E. LYNN JENKINS, Hinckley, advocates ("British Medical Journal") the employment of oil of sassafras as a treatment for ringworm. The hair is cut closely around in order to identify the patches, and the application of the oil made twice a day by means of a camel-hair brush. This is continued for a few weeks, as the case indicates. No irritation is produced, while the preparation is most pleasant to use. Not only is the spread of the infection prevented, but that the fungus is being destroyed with certainty is recognised in two or three weeks by commencing development of fine hairs. The oil is equally serviceable for pediculosis.

Soamin Therapy.

IN the "British Medical Journal" Dr. R. Prichard records a case presenting the early symptoms of general paralysis which recovered under soamin. The subcutaneous administration of one grain of soamin was begun on September 7 and continued every two or three days until September 20, when the dose was increased to 5 grains. Up to October 27, when the injections were stopped, 86 grains had been administered. A voyage was afterwards taken to South Africa and the recovery is reported as complete. In the same issue (January 22, p. 193) Dr. T. Arnold Johnston, Leicester, deals with the intravenous injection of soamin in cerebro-spinal meningitis. In two cases in which soamin was employed the patients quickly recovered. The dose in these cases was 3 to 4 grains injected into the median basilic vein.

New Use for Lactic Bacilli.

DR. DAVID WATSON ("B.M.J.," January 22, p. 192) advocates the use of lactic acid bacilli in the treatment of gonorrhœal and mixed infections of the female genital tract. The liquid employed was obtained by filtering "sauerkultur," made from skimmed milk by the Glasgow Dairy Co. Filtering separates the casein and leaves a slightly opalescent whey containing lactic acid bacilli in large numbers, as well as lactose, lactalbumin and salts. The solution can be strengthened by the addition of sugar of milk, and, if desired, a powdered tablet of lactic acid bacilli. After a thorough disinfection of the parts all excess of disinfectant is removed, and the lactic fluid introduced into the vagina. In the most favourable cases the secretions are normal in a few days. In other cases the treatment is repeated weekly until cure is complete, usually in two to three weeks.

A HORSE named "More Trouble" gave "The Chemist" 7 lb. and a beating in a race at Sandown Park last week. "Also Ran" says that chemists want all the pounds sterling they can receive without being left.

INFORMATION DEPARTMENT



The object of this department is to supply our subscribers with the names and addresses of manufacturers and agents, or other business information which they may be in need of. Inquiries should be sent by post, addressed to the "Information Department of 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

Inquiries in regard to dispensing, legal, practical, technical, or other pharmaceutical subjects should be addressed to The Editor, who will reply to them in the Correspondence Columns.

Information Wanted.

We would be obliged if readers would reply, by postcard or otherwise, to any of the subjoined inquiries. Replies should be addressed to the "Information Department of 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

- 70/16. Makers of "Benger's Liniment."
- 73/5. "Pinoform": makers and London agents.
- 73/25. "Granose biscuits"; where may they be procured?
- 70/22. "Caledonia Food": who are makers or where obtainable?
- 66/55. Address of "Llewellyns," makers of manœuvre preparations.
- 73/4. "Ukala Cream": address of manufacturers or proprietors.
- 69/5. What is "Sanson" or "Samson" oil, and where obtainable?
- 66/22. "Beller's One-solution Hair Dye": who makes or where obtainable?
- 73/21. "Hermaline" and "Eucalyptus Verbena" perfume; where obtainable?
- 66/53. Proprietors of "Stainton's Petroleum for the Hair," "Bobby Fly-catchers," and "Non-buzz Fly Exterminators."

Information Supplied.

In reply to inquiries, information has been sent during the past week to subscribers and others by our Information Department in regard to the following subjects. The information will be repeated to any others requiring it who send a stamped and addressed envelope for the purpose to the Information Department as above.

- "Acushla" perfume, proprietors (71/44).
- Mrs. Allen's perfumery caskets, makers (70/23).
- "Apetol," makers and agents (69/16).
- Betol-Oil, makers (70/21).
- "Carlton" toilet-paper (68/33).
- Cellulose acetate, makers (66/52).
- Dried milk, makers (71/24).
- Edgar's Croup Lotion, proprietors (70/21).
- "Empress" powder-leaves, supply (69/74).
- "Estoral," makers (66/13).
- "Filmaron," makers and agents (71/53).
- Frazer's Tablets, proprietors (71/54).
- "Galvanit," particulars of (68/1).
- Gellé frères' dentifrice, makers and agents (70/21).
- Hairdressers' sundriesmen (69/72).
- Houbigant's perfumes, agents (187/28).
- "Imperial" toilet-rolls, makers (68/33).
- Llewellyn's manœuvre preparations, supply (66/55).
- Manufacturing chemists, various addresses (66/69).
- Marshall's "Giant" cement, supply (69/15).
- Naphthalene compound blocks, makers (66/42).
- "Neostyle," makers (68/28).
- Nurses' wallets, supply (187/28).
- Knee-caps for rheumatism, makers (187/28).
- Oil analysts (71/30).
- Parchment bags for menthol snuff, etc., makers (70/6).
- Powder-paper booklets, makers (69/74).
- "Progress" toilet-paper, makers (68/33).
- Robbins' capsules, address of maker (63/35).
- Rouse's "Synonyms," publisher (68/27).
- "Samol," makers (71/53).
- Scott's pills, proprietors (71/54).
- Stainton's petroleum for the hair, supply (66/53).
- Synthetic violet, makers (69/57).

APPRECIATIONS.

- We thank you for your two inquiries (71/31).
- Please accept my thanks for your courtesy (71/56).
- Many thanks for your letter; we will do the necessary (71/33).
- Please accept our thanks for your letter of the 7th inst. (71/19).
- Many thanks for your favour of the 7th inst.; we will at once communicate (71/22).
- Many thanks for your letter giving makers of enamelled plates. Will do as you suggest (72/8).
- We beg to thank you for your kind letter of the 7th, which will have our immediate attention (70/49).

Observations and Reflections.

By Xrayser II.

The Regular Apprenticeship Case

decided by the Court of King's Bench re-establishes the important principle laid down by Parliament in 1785 that chemists or druggists, like certain other qualified persons, are specially privileged in retailing medicinal preparations. A "regular apprenticeship" was for that purpose the test of qualification embodied in the Medicine Stamp Act of that year, and was the means of discriminating between haphazard druggers and chemists or druggists by training. Mr. George Price in 1830 remarked of this that certain persons "by apprenticeship to . . . chemists and druggists . . . derive the qualification of skill from discipline for engaging and practising in the sale of drugs and medical preparations," and were "exempted from all the restraining and disabling provisions" applicable to persons not so qualified. This was not, however, realised by the Revenue authorities until it was established by the decision in *Farmer v. Glyn-Jones* seven years ago. The regular apprenticeship principle is now re-established, and this on the eve of changes in pharmacy qualification which will make regular apprenticeship the first requirement of Minor candidates.

The Registrar's Report

is an ominous document in so far as fewer students registered last year than in 1908, and it looks as if 400 is the high-water mark of the annual influx into statutory pharmacy. Since it is not reasonable to expect all these men to qualify, and as the annual depletion is just about 400, it follows that at the rate we are now moving the trade cannot possibly keep pace with the advance in population. In point of fact, it has been marking time for many years past, and we are relatively very much reduced in numbers as compared with what we were twenty years ago. This is progress in the direction satirically advocated a long time ago by Mr. B. S. Proctor, who pointed out that pharmacy's real benefactor is the man who makes one pharmacist grow where two grew before. Quite evidently we are hastening along that backward road. There are, of course, many people, possibly even pharmaceutical councillors, who view the prospect of a declension in numbers with complacency. These men will find nothing alarming in the idea that we are becoming steadily depleted in numbers, and that of those that remain no small proportion are connected with drug companies whose professed object is to eliminate the private trader altogether. This is another ominous sign. Is the time coming when there will be a pitched battle between the companies and the private pharmacists for the possession of the ark of the covenant—the "Square" itself? Already on the Council are three members who are connected with limited companies, two as directors. The businesses are, of course, historic, and one only is in the retail; but in the development of modern business many pharmacists eligible for the Council will, in the nature of things, be connected with limited companies or partnerships—the "unclean thing" of years ago. When will it have completed all the stages of purification?

Fancy Names

for secret or other remedies not only mislead the profession and the public, but occasionally cause a good deal of trouble to the guileless philologist, who naturally associates names with meanings. Not many months since, the author of several well-known works on word-derivations asked in "Notes and Queries" for the origin and signifi-

cation of the name of one of the proprietary drugs to which Professor Dixon referred in his address to the Therapeutical Society on February 1. He was evidently unaware that the name was, in that connection, entirely meaningless, and intended to veil rather than to reveal the nature of the drug. The puzzling of a philologist or two does not, perhaps, matters very much; but from the point of view of medical science it is of great importance that the name of a new remedy should indicate its composition. That the success of the more vulgar nostrums depends upon their secrecy is doubtless true; but it is a monstrous inconsistency, and a crying evil, that doctors should, merely on the recommendation of the inventor, prescribe drugs of the nature of which they know nothing. This is to place themselves on a level with the ignorant rustic who asks for a box of Obfusco's Pills on the ground that "they seem to speak well of them i' th' paäpers." And it is certain that those who do this are very largely responsible for the increasing habit of self-dosing which they decry. Pharmacists ought to thank Professor Dixon for having put the saddle on the right horse.

The Varied Interest

of the *C. & D.* Winter Number could not well be better shown than by a comparison of the article on herb-gathering, with Mr. Maskew's account of his collection of books. The former recalls to mind the quaint lore of the old herbalists, of whom some few descendants yet survive in out-of-the-way places. One of these (a disciple of Culpeper), personally known to me, still observes a good many of the traditional methods of gathering his herbs; some he will pluck only when the dew is on them, others only when the sun shines; some in the wane of the moon, others when she is waxing; some he will gather by hand only, others he will cut with a knife. He came to me once to report that he had been told of a mandrake growing in the neighbourhood, and to ask for my help in pulling it up, as he understood it was "a tickle business." Of course, the "mandrake" was only a briony.

Mr. Maskew's Library

makes one's mouth water. I am sorry he depreciates Quincy, whose book is, at any rate, of considerable historical interest. The prices quoted for imperfect copies of Lyte seem rather high, especially that for the third edition, if, as Baker says in his introduction to Gerard, only the first edition has the figures. Lyte's translation was from a French version by Clusius, and contains matter not in the first edition of Dodoens. Although printed abroad, it was published in England by Gerard Dewes, "at the signe of the Swanne in Pawles Churchyard." My copy (a very imperfect one) cost me ten shillings, but this was many years ago. A perfect copy was offered not very long since at ten guineas, and a "fine tall copy" of a later edition at six guineas.

The Salt Controversy

which "Saline" began in the *C. & D.* a few weeks ago has had a fitting supplement in Dr. Ackerley's paper. I confess I have always held the belief that salt is a necessity, one historical statement having clung to me about the terrible sufferings of the natives of India when the salt tax deprived them of the condiment. After the evidence supplied by Dr. Ackerley, and in a minor degree by "Saline," there is room for reconsideration of opinion. If the medical facts are as stated by Dr. Ackerley, it is evident that some intractable diseases, like eczema, may not be so difficult to treat after all. Every chemist in business is repeatedly asked for advice as to the treatment of simple skin diseases, and while I do not recommend counter prescribing I do not see that much harm can result in giving such customers an effervescent saline, and the hint that it might pay them to stop taking salt, or reduce the amount they have been accustomed to take.

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Beautifully finished.

This flask has been designed to fit the pocket comfortably, whilst the double cap renders it extremely easy to clean.

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PATENTS AND TRADE MARKS.

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No. 1 Finest Pure CRUSHED LINSEED	22/cwt.	Finest Pure STARCH POWDER	22/cwt.
No. 2 Pure PUSHED LINSEED	21/cwt.	No. 1 Finest Light Pure PRECIPITATED CHALK	25/cwt.
Best Cleaned LINSEED (TEA)	21/cwt.	EPSOM SALTS, E.S.S. Purified, Clean, and Dry	11/6 cwt.
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Editorial Articles.

Trade in January.

THE Board of Trade returns for January show that the business improvement inaugurated in the spring of last year continues to make very satisfactory progress, both the imports and exports having advanced, in spite of the General Election, by 2,420,790*l.* and 6,000,069*l.* respectively, while re-exports are also 1,459,613*l.* up. It should be pointed out, however, that the comparison is with a month that was bad—January 1909 was the worst month of that year. January 1908 showed 56,63,379*l.* of imports, the same month last year 53,500,364*l.*, and last month 55,921,154*l.* The exports of British produce for the same months were 34,407,767*l.*, 28,803,046*l.*, and 34,803,115*l.*, while the re-exports were 6,599,209*l.*, 6,687,551*l.*, and 8,147,164*l.*, so that import business has almost returned to the exceptionally high level of 1908, and export business has passed it. Comparing the figures with those of January 1909, we find in the imports that the chief expansion (2,448,726*l.*) was in food-stuffs, due mostly to larger purchases. Raw materials were 1,352,239*l.* less, owing to a heavy decline in cotton, which is 3,450,691*l.* less; but, with one minor exception, all the remaining nine items are up considerably, not the least important being an advance of 533,292*l.* in imports of oil seeds, nuts, oils, fats and gums, which stand at 2,920,364*l.* In articles wholly or mainly manufactured there was an increase of 1,360,302*l.*, the advances being spread over practically the whole group. Chemicals show an advance of 140,443*l.* in a total of 881,270*l.*, the outstanding features being the expansion in glycerin (9,206*l.*), tartaric acid (2,914*l.*), cream of tartar (1,261*l.*), coal products, not dyes (2,267*l.*), miscellaneous chemicals (67,099*l.*), aniline and naphthalene dye-stuffs (20,088*l.*), gambier (8,625*l.*), and "other articles" (44,917*l.*). Seventeen articles met with a decline, but the amounts are mostly trifling, the largest being tanning extracts (8,342*l.*). Quinine imports increased by 123,410 oz. to 261,742 oz., but the value of unenumerated drugs and medicines fell by 3,249*l.* to 82,518*l.* On the export side the advance of six millions sterling is equal to 20 per cent. The exports of food-stuffs and raw materials were only slightly higher by 177,075*l.* and 266,036*l.* respectively; but this was more than compensated for by the increase of 5,692,072*l.*, of which 1,736,193*l.* was in new ships, cotton goods being a close second, with 1,332,095*l.* Expansion of exports in manufactured articles was shown by the whole group with the exception of machinery. Chemicals were 49,773*l.* better

the shipments being as follows : 1,367,105*l.*, compared with 1,317,332*l.* in 1909 and 1,462,528*l.* in 1908. These figures show that there was a good steady demand in January. This especially applies to drugs and medicines, exports of which were 13,315*l.* more, and reached 136,507*l.*, including 4,119*l.* for quinine, the shipments of which reached 101,681 oz., contrasted with 79,819 oz. and 55,395 oz. in 1909 and 1908 respectively. The increased distribution of quinine for malarial purposes was a feature last year, and possibly may be so this. Bleaching powder and soda compounds showed an appreciable expansion, as did also painters' colours, sulphuric and tartaric acids, and miscellaneous chemicals. Coal products (not dyes) declined by 5,000*l.* in value, and shrinkages are also noted in copper sulphate, glycerin, cream of tartar, and chemical manures. On the whole it may be said that January made a good start for the year in the chemical and drug trades, and there are indications that the outlook in other important industries is also good. We observe from the report that some important alterations have been made in the classification of goods and the separate designation of the countries of origin or of destination. For instance, the imports of sumach, formerly included in "other articles," are now shown separately, and a separate entry is also given to soya-beans, which were formerly included in "unenumerated seeds." The petroleum entry has been revised to show imports of (1) motor-spirit, (2) spirit other than motor-spirit, and (3) other sorts. Among British exports, "opium, dried and powdered in the United Kingdom," formerly included in "medicines, other sorts," is now shown separately. This is a remarkable entry. Had it been "opium alkaloids prepared in the United Kingdom" we could have understood its utility, but why a comparatively small thing like pulv. opii should have a line all to itself is difficult to understand. The exports in January were *nil*, and, considering how often the article is a small item in big miscellaneous consignments, a similar entry is likely to recur. Glue, size, and gelatin, formerly included in "other articles," are now specified, and corresponding revisions are made for these articles under "re-exports." Cochineal, owing to its declining consumption, is now included in "other articles," whereas it was formerly shown separately.

Proprietary Medicines in Australia.

THE interpretation of the trade-description sections of the Australian Commerce Act has caused some trouble among exporters of proprietary medicines in this country. The matter is dealt with in the January number of "The Chemist and Druggist of Australasia," where an endeavour has been made to gather the views of the Department which administers the Act. A careful study of some of the points here dealt with may do away with much of the uncertainty which at present exists. A large number of medicinal preparations and invalids' foods from different countries have already come before the authorities, and the claims made upon the labels and in the accompanying printed matter have been submitted to very careful examination. Wherever necessary the preparations have been analysed in the laboratory attached to the Commonwealth Trade and Customs Department. The essential principle of the Commerce Act is that there shall be "truth on the label and in any accompanying printed matter." No false statements of any kind are permitted. The second principle is a development of the first: "extravagant claims of all kinds are to be condemned." The word "extravagant" is used, and this is not the same as "exaggerated." There is in the Department a tendency to recognise that a certain amount of "puff" is to

be expected in all commercial transactions, and, therefore, "puff" readily acknowledged as such by the public has hitherto been tolerated—not approved. The Department takes up the position that except in those cases where the claims advanced would, if relied upon, lead directly or indirectly to harmful results to users, absolute compliance with its requirements is not immediately insisted upon. But in all such cases importers are fully informed of the nature of objection taken to their printed matter, and it is pointed out to them that the Department may probably insist upon complete removal or proper modification of the statements to which exception is taken. If, however, a label or a pamphlet has to be condemned for an extravagant or misleading statement and has to be reprinted, the Department generally revises the whole of the wording. By extravagant claims is meant such things as these:

A certain aperient was claimed to be a preventive of Bright's disease.

A well-known tonic was advertised as a cure for some stages of consumption.

Teething is spoken of as if it were a disease, and the cause of convulsions and other serious symptoms, whereas teething is not a disease, and is simply associated with various ailments common to the same age period.

A counter-irritant for animals is declared to be a cure for ringbone.

An invalids' food introduced forty years ago as a highly scientific preparation is still spoken of in the terms that might have been used in good faith then, but at the present time could only be used in that sense by those who are unaware of the advance made in infant-feeding.

A highly spirituous preparation is stated to be so harmless that it is impossible for anyone to take too much, although this may speedily develop the alcohol-habit.

The Department holds that all such statements are not merely extravagant in themselves, but are dangerous to the health of the community. One well-known proprietary mixture of perhaps nearly fifty years' life is declared to be a cure in the early stages of swellings and tumours of all kinds, which may lead some woman to rely upon this until the stage when cancer could be benefited by an operation has altogether passed. Where statements of this kind are made the article is not allowed to enter the Commonwealth until the labels or pamphlets are modified. In cases where the statements do not refer to the medical properties of the preparation—such, for example, as the statement that it is used in specified Royal houses—it might be considered legitimate for the Department to ask that evidence should be submitted, and if that evidence were satisfactory the statement should be allowed to go through. Where the proprietor asserts that the statements of remarkable cures are justified by the testimonials that have been received from the general public, the Department points out that such evidence should not be accepted without sifting. Very often, although sincere, such statements are based on a mistake. The Department recognises two or three distinct classes of medicines. First, the class including all those which embody a new idea or invention or discovery of value to the public. Such a preparation is worthy of all the protection of secrecy, and so long as the claims made for it are reasonable and in accord with modern scientific knowledge such preparations will be welcomed. Second, those medicines where the proprietor puts up an old remedy of known value with such literature and directions as will make it convenient and easily utilised by the public. Here, if no extravagant claims are made, the remedy will not meet with any difficulty or objection on being imported into Australia. The third class is where remedies have no such foundation in science or experience to justify the claims made, and the sale depends not upon the real service to the public but upon the exaggerated

claims in the advertisements. These will meet with little mercy. Another phase of description occurs which is considered very objectionable—viz., the insinuation that other drugs or preparations are useless, harmful, or fraudulent. Any preparation must make good its own claims. The assertion that articles have been passed in one State and stopped in another is one that will necessarily arise when goods are imported at different centres. Under the Quarantine Act cultures of bacteria come under the supervision of the director, serums and vaccines do not. But when the statement is made that a certain tablet contains so many hundred thousands of bacteria a bacteriological analysis has been done to test the statement. It is possible that the tablet contained that number of active bacteria when it left the factory, but the label guarantees it for some months at any rate, and if it is found that instead of hundreds of thousands there are only hundreds, the label will have to be modified or the article excluded from importation. These remarks are set forth primarily for the information of those who have to deal with the Commonwealth Customs Department—which we do not class with those who have no work to do, but it seems to be striving for that State of Perfection which man has not yet achieved, and which is usually unattainable.

German Potash Bill.

"In the interests of the nation's prosperity" the German Imperial Government is promoting a Bill to regulate the sale of natural potassium salts in Germany. The Bill has received the sanction of the Federal Council, and was laid before the Reichstag on February 4. The reasons adduced as grounds for this interference on behalf of the State in a private industry are that the imminent likelihood of a dissolution of the existing syndicate will bring about a competitive war, entailing a loss of national wealth, a possible considerable benefit to foreign agriculture by the abolition of a difference in the price charged to home and foreign buyers, and closing of many potassium works which might be purchased cheap by foreigners. Should the Bill pass it will come into force at once, and remain in effect until April 1, 1930. The Bill proposes to confine the sale of potash products to a Board consisting of mine-owners, who will appoint a committee to frame rules for production and sale, which rules must be approved by the Federal Council. The Board will act as sellers of the products, and the mine-owners can only sell to the Board, the amount which each owner may produce annually being fixed as in commercial syndicates. The Board will also fix prices subject to the approval of the Federal Council, first consideration being given to home-market requirements, and the price for export must not be less than the highest net price charged on the home market. The salts to which the Bill refers are all potassium minerals in a solid or dissolved form, directly obtained from the potassium mines, chloride and sulphate of potassium, sulphate of magnesium, potassium manure salts, and all other salts or residues obtained or prepared from the salts, also any mixtures and preparations. Penalties for transgressions are provided, and they are heavy. The Bill is most adversely criticised in Germany. Thus the "Frankfurter Zeitung" denies the necessity for State interference in the industry, and states that it has been introduced only in order to benefit certain groups of works mainly belonging to the State. Limitation of sale means foundation of new works and defeat of one object of the measure. The important point, however, is the fulfilment of existing contracts entered into before the Bill was launched, espe-

cially the so-called Bradley contracts. The amounts contracted for may be delivered, but they will be deducted from the quantity allotted to each member of the existing syndicate, and if this should not prove sufficient he will have to obtain it from other works. In other words, the existing well-grounded organisation will be penalised to favour other works which have had no part in the effective carrying out of a profitable business transaction. The article closes with a word of admonition to the Reichstag, pointing out that it is not justified in sanctioning State interference for the benefit of an interested minority, and even if the latter does include Government property that is no excuse for such a step. At a meeting of the Board of the new Kali Syndicate, Ltd., it was reported that in the past year sales had increased by 750,000*l.*, and that the German Kali Works in Baltimore hold a stock of about 95,000 tons of salts. A commission was appointed to safeguard the interests of the company. We may add that the headquarters of the potash industry are centred round Stassfurt, Leopoldshall, and Aschersleben, in Saxony and Anhalt. The potash salts were formerly regarded as useless, and are still known in Germany by the name of "Abraumsalze"—i.e., rubbish salts. In 1861 proposals were first made to utilise them, and this was practically the inception of the present German chemical industry, which has since assumed such mammoth proportions. The Stassfurt deposits contain in the upper stratum of 40 metres thickness, carnallite ($\text{KCl} \cdot \text{MgCl}_2 \cdot 6\text{H}_2\text{O}$) as the principal salt; the next stratum, of 56 metres, contains 17 per cent. of kieserite ($\text{MgSO}_4 \cdot \text{H}_2\text{O}$), 13 per cent. of carnallite, and sodium chloride. Below this the 63-metre-thick polyhalite stratum contains 91 per cent. of sodium chloride and 7 per cent. polyhalite ($2\text{CaSO}_4 \cdot \text{MgSO}_4 \cdot \text{K}_2\text{SO}_4 \cdot \text{H}_2\text{O}$), and 1.5 per cent. of magnesium chloride. The lowest stratum, of 215 metres thickness, is composed of almost pure sodium chloride. In the carnallite deposit are found also sylvin (KCl), schänite ($\text{K}_2\text{SO}_4 \cdot \text{MgSO}_4 \cdot 6\text{H}_2\text{O}$), kainite ($\text{KCl} \cdot \text{MgSO}_4 \cdot 3\text{H}_2\text{O}$), and other less notable constituents. At present some sixty mines are in operation and thirty to forty are expected to be opened in the course of next year. The total export of potassium salts of this class is given in the Imperial statistics as follows, the value for a metric ton being taken as 20*s.* 6*d.* :

	1909. Tons	1908. Tons
Total export	946,514	818,617
Export to Belgium	48,114	38,847
" France	32,307	32,772
" Great Britain	80,110	78,121
" Netherlands	134,120	143,047
" Austria-Hungary	54,675	47,686
" Sweden	49,399	51,467
" United States of America	469,963	364,731
Value of total export, 1909, 970,200 <i>l.</i> ; 1908, 839,150 <i>l.</i>		

The Word "Pharmacy."

The way is getting a little clearer for action in regard to the word "pharmacy." Mr. Idris, speaking from his knowledge as the representative of chemists having charge of their case when the Poisons and Pharmacy Act, 1908, was before Parliament, explained to a meeting of London chemists on Wednesday that the opportunity of legislating on the subject then was considered, but counsels for doing nothing prevailed. Mr. Idris holds out slender hope of restriction of the word to pharmacists, but agrees that in principle it belongs to them. From Dewsbury we learn that the President of the Board of Education has expressed himself strongly in favour of such restriction. In these pronouncements we see a glimmer of hope and encouragement for chemists to keep at the subject. In

time, no doubt, the Pharmaceutical Council will break silence; when that may be depends largely upon individual utterances throughout the trade.

Pharmacopœia Revision.

We have referred on several occasions to the agitation in the United States for more general participation in the revision of the monographs of the United States Pharmacopœia. It appears that some manufacturers and wholesalers there consider that they are not sufficiently consulted in regard to the revision. We do not attempt to discuss the merits of the American complaint, but we certainly have no such trouble in Great Britain, as is evidenced by the procedure adopted by the British Pharmacopœia Committee of Reference in Pharmacy. The Committee's reports to the Pharmacopœia Committee of the General Medical Council have hitherto been published, so that all may criticise, if necessary, and this week Mr. Chas. A. Hill and Mr. John C. Umney have communicated to an evening meeting of the Pharmaceutical Society proposed monographs dealing with essential oils. Their communication is printed in the section of this issue beginning on p. 271, and we call special attention to the invitation which the authors extend to all who are capable of criticising the suggested alterations. The subject is one of which comparatively few people in this country have such expert knowledge as to criticise in great detail, but there must be many who have experienced difficulties in ensuring the purity of medicinal essential oils. Expression of such difficulties at the present time is appropriate, and it would be advantageous to the Pharmacy Committee to hear even of little points now, rather than when their labours are completed.

Public Pharmacists.

Two points are worthy of note in connection with the addresses of the incoming and outgoing Chairmen of the Public Pharmacists' and Dispensers' Association at the annual meeting held on January 27. The former (Mr. G. W. Udale) made the following statement:

Chaos is the result of too many grades in their ranks. "The B.Sc. Pharm." of the philanthropic hospital, the "dispensing chemist" of the pauper lunatic asylum, the "dispenser" to the rate-supported Poor-law infirmary or Union, the "compounder" of State prisons and the Army, and the gentleman possessed of no qualification or official status who dispenses in the doctor's surgery are all, in the eye of the public, simply "dispensers."

It is evident that the pharmacist at the public institution, like his brother chemist who attempts to run his business on professional lines, suffers from what he deems to be unfair competition. In both cases the varied requirements have given rise to multifarious types of compounders and vendors, as well as much difficulty, and education of the public on behalf of the chemist in business, or of the appointing authority in the case of the public pharmacist, appears the only solution of the difficulty; but the National Union of Assistant Pharmacists apparently rely on legislative efforts to remedy the grievances, for the Executive has resolved that "something is to be done"—probably questions asked in Parliament when legislators have "settled down." The retiring Chairman called attention to the competition for dispenserships by ladies, and suggested as a remedy that a fixed salary for each appointment, independent of sex, is desirable. It is supposed that women pharmacists accept lower salaries than men, but Miss Margaret Buchanan has repeatedly stated that the Women Pharmacists' Association and its members are only desirous of keeping up the standard of remuneration.

Society of Chemical Industry.

LONDON SECTION.

A MEETING of this Section was held at Burlington House, Piccadilly, W., on February 7, Dr. J. Lewkowitsch in the chair. It was a crowded meeting.

PRESENTATION TO MR. BAKER.—After the minutes had been read, the Chairman, on behalf of the subscribers, presented Mr. Julian L. Baker, the late Hon. Secretary and Treasurer of the Section, with an illuminated address, writing-table, and arm-chair in recognition of his services. To Mrs. Baker was also presented a purse containing the balance of the money subscribed. Mr. Baker suitably replied, and said he had been benefited by contact with the business methods of the Society, and his experience had been enlarged by association with the men of affairs, who in their spare time directed the business of the Society.

AMMONIA-SODA.—The paper of the evening was on "The Manufacture of Ammonia-soda: its Present State and its Future," by Professor A. Colson, of Paris. The Chairman read the paper, which concerned the scientific basis of the process and possible modifications. The output at present is two million tons of soda per annum, and the process occupies a dominating position, which even the competition of the electrolytic method is not likely to affect for the present. The process was then outlined, the equations being written on the blackboards. Salt is treated with ammonium bicarbonate in the form of ammonia and carbonic acid, and at a low temperature sodium bicarbonate is precipitated, this salt being difficultly soluble in a solution of ammonium chloride. The sodium bicarbonate is heated to form the normal carbonate, whilst the mother-liquor is treated with caustic lime to recover the ammonia, leaving a residue of calcium chloride. Referring to the apparatus employed, Professor Colson said this varies in different works, and many of the improvements are secret, but the fact remains that a trifling modification of the plant makes the difference between success and failure. One of the ammonia-soda works in France had to be closed owing to the use of a wrong type of pump for drawing off the carbonic acid from the lime-kilns. In precipitating the sodium bicarbonate the form of the salt is important; it is best in transparent grains, whilst in the subsequent calcination care has to be taken not to allow the bicarbonate to aggregate in lumps. The ammonia in the process is only used as an intermediary, and the loss must be kept down. The plant employed in making ammonia-soda is largely automatic, the only possibility of extension in this direction being the employment of automatic lime-kilns. The carbonic acid employed is not pure, but the lecturer showed that the enrichment of this gas effects a saving in the cost of the process. The feature of the paper was the suggestion to employ sodium nitrate in place of sodium chloride, by which means a residue of calcium nitrate and sodium nitrate could be obtained of the same value as a fertiliser as the original nitrate. Professor Colson stated that there are great possibilities in the suggestion and that the chapter of chemical processes which leads to the production of ammonia-soda is not yet closed.

In the discussion which took place, the CHAIRMAN stated that the process is one in which the engineer holds sway. Sir WILLIAM RAMSAY referred to the economic problem involved in the replacement of labour by automatic machinery. Mr. STEWART said the use of sodium nitrate was purely a matter of £ s. d., and the success of the process could only be proved by working on a large scale over a reasonably long time. After other speakers had put questions, Professor Colson replied (in French) that the use of sodium nitrate would reduce the number of operations required for the manufacture of ammonia-soda, and saving would be effected in the salt, limestone, and coal. He pointed out that he was comparing the process with that in which solid salt is used, not with that in which brine is employed. In France sea-salt is used. The Le Blanc process has been discontinued in France since 1907. Some interesting particulars were given of the effect of the ammonia-soda process on the older method, and it was suggested that sodium sulphate might be used instead of salt.

Pharmaceutical Society of Great Britain.

EVENING MEETING.

THE third evening meeting of the present Session was held at 17 Bloomsbury Square, London, W.C., on February 8. The President (Mr. J. F. Harrington) was in the chair, supported by Mr. E. White. There was a better attendance than has been customary for some time past. Among those present were: Mr. F. C. J. Bird, Mr. E. T. Brewis, Mr. H. Deane, Mr. O. A. Elias, Mr. Alan Francis, Mr. F. W. Gamble, Mr. F. Goldby, Prof. H. G. Greenish, Mr. E. F. Harrison, Mr. E. M. Holmes, Mr. W. L. Howie, Mr. J. A. Jennings, Mr. E. W. Lucas, Mr. W. A. H. Naylor, Mr. E. J. Parry, Mr. E. S. Peck, Mr. F. Ransom, Mr. C. E. Sage, Mr. J. C. Shenstone, Mr. W. J. U. Woolcock, and Mr. A. Wright.

FRENCH CHALK.

The proceedings began with a note by Mr. A. GUNN on the identity of French chalk and talc. The author finds that although substances under these names are listed at different prices, they are identical chemically. He suggested that, as talc is now much used as a dusting-powder, a monograph might be inserted in the B.P., with the synonym French chalk.

ESSENTIAL OILS OF THE BRITISH PHARMACOPŒIA.

The paper under this title, the joint production of Mr. C. A. Hill and Mr. J. C. Umney, was next taken, Mr. HILL reading the first part and Mr. UMNEY that referring to the proposed monographs for use in the Pharmacopœia. The paper is printed on page 271. Mr. Umney explained that the object of putting forward the monographs was to evoke criticism. The discussion was opened by

Prof. H. G. GREENISH, who remarked that, as the author's results were obtained from an experience extending over a number of years, the monographs would be an improvement on those at present in the Pharmacopœia. The greater precision aimed at was an advance in the right direction. There are various constants mentioned of which the present B.P. takes no notice, the methods of assay now embodied in the Pharmacopœia being only approximate. Although ordinary pharmacists have the ability to perform the tests, they may not happen to possess the apparatus, some of which is expensive. He would like to know whether it is not necessary to lay down the identical conditions of the test so that different workers may get the same results. It seemed to him that more details are needed—size of apparatus, conditions of distillation, etc.—so as to make the results comparable. He had often found himself at a disadvantage when working with apparatus which does not conform with that laid down by various authorities. Even when employing apparatus exact in every particular it is not easy to get the results one should get. As an example, he mentioned the yield of santalol, which he had never been able to make so high as 90 per cent. Similar variations exist in regard to other figures for essential oils.

Mr. E. J. PARRY said the standards proposed were difficult to criticise, as they are mostly those upon which analysts have agreed among themselves. Some, however, require careful criticism. Taking first the general question of B.P. standards, he thought the Pharmacopœia should remove incorrect expressions, such as "rotation of the plane of a ray of polarised light." The time has come for the B.P. authorities to recognise their responsibilities. The Pharmacopœia is *prima facie* a standard under the Sale of Food and Drugs Acts, and care should be taken to fix standards to which the analyst can work. The fuller the monographs are made the better, so that the analyst can support his findings without reference to outside authorities. In regard to the standards suggested by the authors, he would like to know whether they are advanced as absolute or restrictive. The limits in the case of santal oil result in an absolute standard, whilst in the case of eucalyptus oil the standard is restrictive. This should be indicated, as it is important from a legal point of view. A defendant may rebut a restrictive standard by evidence. He failed to see why carvol and eucalyptol should be excluded from the Pharmacopœia, unless it is that they

are more difficult to prepare than the oils. Referring next to the estimation of cineol in cajuput and eucalyptus oils, Mr. Parry said he prefers the method of the United States Pharmacopœia, in which the oil is diluted with petroleum ether before mixing with the phosphoric acid—this gives a more correct determination. He did not agree with the use of neutral sodium sulphite in place of the bisulphite in the determination of cinnamic aldehyde in cinnamon oil. Why is the upper limit of cinnamic aldehyde placed so high as 75 per cent.? He was strongly against reducing the standard for copaiba oil; it would open the flood-gates to adulteration of African oils. From the recently issued laboratory report of Messrs. Evans Sons Lescher & Webb, he noticed that in forty importations of copaiba from South America there was not a single instance of an optical rotation in the oils of less than -9° or -10° . All that is required in the monograph in the present Pharmacopœia is to correct the slip that has crept in during the drafting. He differed from Mr. Umney regarding the minimum figure for esters in lavender oil. Oil from the Italian frontiers often contains only 25 to 26 per cent. of linalyl acetate. These oils are quite as sweet as samples containing 30 per cent., and much sweeter than those with 40 per cent. He regarded the lower refractive index for rose oil (1.456) as too low; he had never found a sample lower than 1.458. On the other hand, some of the finest oil has a specific gravity as low as 0.849 or 0.850. The acetylation process suggested by the authors seems to apply only to oils containing no esters, but he had not had time to fully study the method.

Mr. W. A. H. NAYLOR said he rose not to criticise the paper, but to emphasise the remark of Prof. Greenish that the chemical and physical constants suggested are the result of the examination of oils over a number of years. This is an immense advantage. From personal knowledge, he believed that it is not to be expected that an analyst can obtain the results he may desire simply from a knowledge of the processes. The only results that can be depended on are those from the hands of men with considerable experience in the examination of essential oils. Considering that the degree of maturity of caraway and dill seeds has an effect on the yield of the oils, he asked to what extent variations in the oils may be expected from this cause.

Mr. E. T. BREWIS said the figures put forward are exceedingly conservative, and there was but little to find fault with, especially as the figures are the result of years of experience. It is somewhat difficult to criticise the paper in the absence of one's own data. He regretted to see the upper limit for dill oil lowered as some of the better oils have quite a high gravity. The upper limit of the optical rotation might reach higher than $+75^\circ$, and thus would be excluded some of the richer English dill oils. The blue colour of oil of chamomile makes it sometimes difficult to take the optical rotation, as the sodium light is employed. The figures for oil of cloves agree in the main with his experience. He noticed that a 5 per cent. solution of potassium hydroxide was employed in place of the 3 per cent. generally used for the eugenol assay. The increase of the cinnamic aldehyde (55 to 75 per cent.) would exclude some of the most fragrant cinnamon oils which do not contain such a high aldehyde content as that. The gravity excludes some of the sweetest oils. He regretted to see the gravity lowered for juniper oil. The monograph regarding nutmeg oil should be modified as regards the oil leaving no crystalline residue on evaporation as many oils leave from $\frac{1}{2}$ to 1 per cent. If this stipulation is persisted in there may be a risk of getting a rectified oil, consisting of the earlier part of the distillation, such oils not being so fragrant as those drawn in this country. The pimento figures are higher than those shown for oil distilled in this country.

Mr. A. WRIGHT asked why both kinds of anise oil should be retained when only the star-anise oil is used in this country.

Mr. E. F. HARRISON said there are many cases at present where the B.P. tests pass an article which is not the real substance. He hoped that in the new Pharmacopœia the authorities would, by a general paragraph or other method, intimate that a mere compliance with the quantitative tests is not sufficient. For instance, only the alkaloidal content

is given of belladonna extract, and the particulars under oil of lavender are similarly meagre. He agreed with Mr. Parry that it should be made clear in the new B.P. whether absolute or restrictive standards are laid down. He noted that in Mr. Umney's suggested standards the temperature at which solution in alcohol is effected is only mentioned once—in the case of ol. betulæ. The omission in other cases may be an oversight, or it may be that the temperature is immaterial. He asked whether there is not a large amount of synthetic wintergreen oil in commerce and whether there is any method of distinguishing it from the genuine. Another reason why carvol is not suggested for inclusion in the Pharmacopœia may be that it is never called for in prescriptions.

Mr. E. M. HOLMES, referring to a slip made by Mr. Umney as to the santalol content of santal oil, said that oil and nutmeg oil require stricter definition.

Mr. E. WHITE said that in making salicylic acid from wintergreen oil he found a whiter product was obtained from those oils which he suspected to contain a proportion of the synthetic oil.

Mr. C. A. HILL, in reply, said he was not prepared to agree with the suggestion to standardise analytical methods. The conditions would have to be laid down very closely, leaving little scope for the skill of the analyst and reducing the process to the level of a cookery recipe. The processes involved are all simple and need no expensive apparatus, except perhaps a refractometer, which he regarded as absolutely necessary for the oil analyst. He had found the santalol content of santal oil to come out at 92 per cent. Mr. Brewis's remarks are valuable, as they are the results of an actual producer. The point about the higher limit of dill oil is just the sort of criticism it was hoped to elicit—the figure may have in consequence to be altered. The matter of the figures for cinnamic aldehyde is a point upon which there is difference of opinion. He thanked Mr. Harrison for his remarks as to the temperature at which solubilities in alcohol are taken; it is that at which water solubilities are taken in the Pharmacopœia. The natural and artificial oils of wintergreen can be distinguished by the nose at a good distance, but there is no method of detecting an admixture up to a certain point.

Mr. J. C. UMNEY also replied. He said he did not purpose to enter into a discussion on the B.P. as a standard under the Sale of Food and Drugs Acts. The book must be taken as a guide for prescribers and not as a text-book for analysts. The expense to the General Medical Council of compiling an analytical work would not be warranted. The best way would be for analysts to accept the monographs as far as they go and consult Mr. Parry's book when in difficulties. (Laughter.) The optical rotation of copaiba oil was purposely put low on account of a new variety, undoubtedly genuine, which has lately arrived in this country from South America. The figures for juniper oil are due to the prosecutions; it may be, however, that before the time for issuing a Pharmacopœia the medical profession may obtain data as to whether the action of the oil is due to the higher distillates or can be replaced by turpentine. The range of the nutmeg figures is in consequence of the variety of imported oils, and the monograph may have to be modified. He repeated that the object of putting forward the monographs was to obtain the criticism of experts and then pass on the fairly complete monographs to the General Medical Council.

A vote of thanks was given to the authors of the papers, and an adjournment made to the examination hall, where refreshments were served.

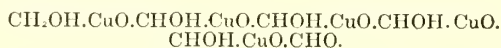
Chemical Society.

A MEETING was held at Burlington House, London, W., on Thursday, February 3, Professor H. B. Dixon presiding. The first two papers were by Professor Pickering, F.R.S., and dealt with

COMPLEX CUPRIC COMPOUNDS.

Some time ago the author undertook an investigation of "Bordeaux mixture," and as a result isolated a large

number of complex copper carbonates. This work has now been extended to the acetates, citrates, and tartrates, and a number of these have been isolated, mostly as "double salts" with potassium. As a rule it is found that they are very soluble in water and form thick, dark, blue syrups with about one-third their weight of water. Complex formulæ are assigned to them. As a specimen of these the formula of a substance, supposed to be present when glucose is first added to Fehling's solution, may be given:



In the second paper attention was directed to the basic compounds formed when lime is added to solutions of copper sulphate, and here again complex substances are formed. In the discussion which followed, the physical chemists, headed by Sir W. Ramsay, were disposed to throw some doubt on the necessity for the complex structures assigned to these substances by Professor Pickering. It was suggested, for example, that there is no real reason for supposing that copper acetate is not similarly constituted to copper sulphate, and that certain of the group radicals, which occurred repeatedly in the formulæ, are of very unstable character, although the compounds described appeared to be quite stable. Also organic chemists were not disposed to accept at once formulæ in which CuO groups were linked up between organic radicals, as representing stable substances. Others, however, who have paid special attention to work on complex copper salts, agreed that Professor Pickering's formulæ are necessary to explain the results obtained.

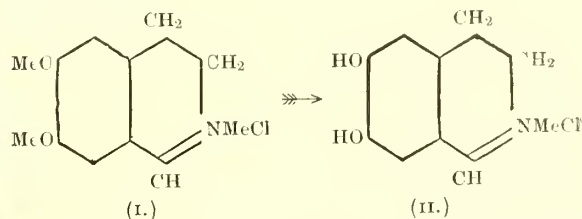
The next paper read was on the "Constituents of Red Clover Flowers," by Drs. Power and Salway, and an abstract of it is printed elsewhere in this issue. This was followed by Mr. Usher with a paper on

THE ACTION OF RADIUM EMANATION ON AMMONIA,

in the course of which it was shown that the α -rays of the emanation decompose ammonia into nitrogen and hydrogen, and that no definite equilibrium-point in this decomposition can be reached. An interesting fact established was that the hydrogen formed is in part driven into the walls of the glass container and can be recovered by grinding the latter and heating the powder in a vacuum.

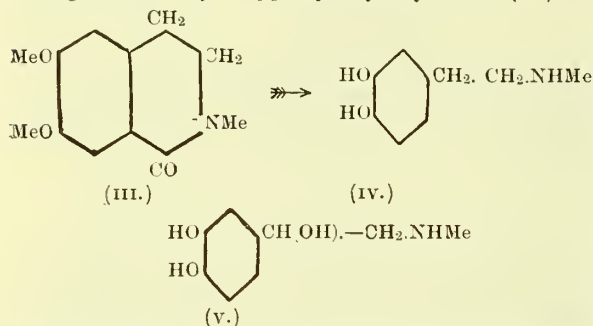
THE SUPRARENAL GLAND PRINCIPLE

came into consideration in the next paper, by Mr. F. L. Pyman, of the Wellcome Chemical Laboratories, Dartford, which was entitled: "Isoquinoline Derivatives—Part IV.—Orthodihydroxy Bases. The Conversion of 1-Keto-6:7-Dimethoxy-2-Alkyltetrahydroisoquinolines into 3:4-Dihydroxyphenylethylalkylamines." The author recently obtained, by the oxidation of laudanone, a new salt, 6:7-dimethoxy-2-methyl-3:4-dihydroisoquinolinium chloride (I.), which is constituted similarly to cotarnine hydrochloride (*C. & D.*, June 26, 1909, p. 983). This salt when tested physiologically proved to cause a rise of blood-pressure (besides other effects), and it was therefore thought of interest to prepare the corresponding orthodihydroxy bases from this and a number of similarly constituted compounds by hydrolysis of the methoxy-groups. Contrary to expectation, it was found that the resulting compounds, for instance, 6:7-dihydroxy-2-methyl-3:4-dihydroisoquinolinium chloride (II.) had no blood-pressure-raising properties so long as the isoquinoline ring remained intact:



The 1-keto-6:7-dimethoxy-2-alkyltetrahydroisoquinolines

(III.), however, when heated with hydrochloric acid at 170°, gave 3:4-dihydroxyphenylethylalkylamines (IV.):



The methyl-derivative 3:4-dihydroxyphenylethylmethylamine (V.) differs only in constitution from β-3:4-trihydroxyphenylethylmethylamine (v.), the levo-modification of which is the active principle of the suprarenal glands, in being devoid of the alcoholic hydroxyl group, and possesses the characteristic suprarenal action in a high degree, causing, amongst other effects, an enormous rise of blood-pressure. The corresponding ethyl- and propylamines are less potent in this respect.

At the next ordinary meeting, on Thursday, February 17, Dr. Thorpe will deliver the Julius Thomsen Memorial Lecture.

Winter Session.

Brief Records.

Guildford Pharmacists' Association.—The members met at the Angel Hotel on Wednesday evening, February 2, and had a chat on trade and Association matters.

Irish Chemists' Assistants' Association.—At a meeting of this Association held at 48 Talbot Street, Dublin, on February 3, a debate, in which ladies joined, took place on "Counter-prescribing." A vote taken showed that the majority deprecated counter-prescribing. Messrs Harmel and Morrow are to visit Belfast to open there a branch of the Association. Future arrangements include a lecture by Professor Kelly and a debate on "Women in Pharmacy."

Oldham Pharmaceutical Association.—The monthly meeting of this Association was held on February 8, the following being present: Mr. C. Gartside (President), W. Gartside, F. Davies, F. Newby, W. Yates, T. Baker, H. Bagshaw, E. H. Holden, G. N. Cooper, W. Cocks, and T. Pickering. Mr. C. Gartside (the President) gave a paper on "Natural Colour Photography," dealing particularly with the autochrome process, some beautiful examples of the work being shown. A vote of thanks to Mr. Gartside was carried with acclamation.

Dundee Chemists' Assistants and Apprentices Association.—A meeting was held in Mather's Hotel on Friday, February 4, Mr. Adamson presiding over a large and representative gathering, when Mr. A. C. Hinrichs (Messrs. Parke, Davis & Co., London) gave a very instructive and interesting lecture on "Serums and Serum-making." He explained in a very simple manner the various processes gone through to obtain antidiphtheritic serum, illustrating his remarks by limelight views. The lecture was much appreciated, and hearty votes of thanks were accorded to Mr. Hinrichs and his firm.

Grimsby Pharmacists' Association.—A meeting was held at Walton's Hotel, Grimsby, on February 7, at 9 p.m., Mr. Cor. Willson (President) in the chair. Messrs. C. H. Ashton, D. Brocklesby, H. W. Colley, T. W. Ellis, W. G. Robinson, A. C. Osborne, E. Sigley, T. D. Sneath, and the Hon. Secretaries (C. N. Chapman and F. W. Heely) were also present. The annual dinner will take place at the Oberon Hotel on Thursday, March 10, and the annual meeting was fixed for the afternoon of the same day. In view of the possibility of the question of the granting of poison licences being again brought before the local authorities, the members were requested by the Secretaries to review the situation, which will be done at the next meeting.

Great Yarmouth Pharmaceutical Association.—The monthly meeting was held at 156 King Street on February 3, the President in the chair. Messrs. Harvey Palmer, W. G. Poll, T. L. Drabble, T. J. Woodcock, A. R. Davies, and A. E. Richmond were also present. Letters were read from Mr. A. Fell, M.P. for the borough, and Mr. H. Foster, M.P.

for North Suffolk, both in favour of better protecting chemists' rights. The question of closing at 1 o'clock instead of 2 o'clock as at present was postponed until the March meeting. The arrangements for the annual dinner were left to the committee. The Captain of the Rifle Club (Mr. A. R. Davies) stated that at the Christmas prize-distribution Mr. Harries had won two prizes, Mr. A. R. Davies one, and Mr. A. E. Richmond one, and in January Mr. A. R. Davies won a spoon in the unlimited competition, Class C.

Bradford Chemists' Association.—The meeting on February 8 was presided over by Mr. J. Gordon (President), and was mainly conversational. Mr. D. S. Priestley outlined a price-protection scheme which is in operation in France, where credit is given for coupons sent to a central office, payment of the bonus only being made where conditions as to selling at a fixed price have been observed. It was resolved to send particulars of the scheme to the Secretary of the P.A.T.A. In subsequent conversation it was elicited that the sale of proprietary medicines is not now so brisk as it has been. The action of the local authorities in condemning French scales, the granting of wine-licences, the probability of the increase of spirit-duty not being enforced, the guarantee for the entertainment of the National Chamber of Trade, and Shop Hours were other subjects discussed.

Manchester Optical Society.—At the meeting held on February 2, Mr. J. C. Kidd (the President) was in the chair. The progress of the proposed Federation of Optical Societies was reported to be favourable. It was resolved to seek an interview with the Board of Management of the Manchester Royal Eye Hospital regarding the restriction of the supply of spectacles to one firm. Mr. A. R. Turner afterwards gave an address on "Astigmatism." He placed the instruments used for detecting astigmatism in the following order of usefulness: Ophthalmometer, retinoscope, astigmatic charts, ophthalmoscope. The ophthalmometer was specially favoured because most of the cases of astigmatism are due to curvature of the cornea, which is very accurately and easily measured by this instrument. A good discussion followed, in which the President, Mr. T. Beardsell, and Mr. A. Hershberg took part.

Chemists' Assistants' Association.—A meeting was held at 73 Newman Street, London, W., on February 3, Mr. F. L. K. Loxley in the chair. Mr. G. A. Tocher presented an "Essay on Cascara Sagrada." Reviewing the introduction of the drug into this country, Mr. Tocher stated that it was included in a paper on "New Remedies" read before the Association by Mr. J. F. Burnett in 1835. A résumé was given of the origin and collection of the bark of *Rhamnus Purshiana*; statistical details of the amount used and market-prices followed, with a short note regarding the successful cultivation of the plant at Kew. Summaries of the various processes advocated for improving the official liquid extract of cascara sagrada or for producing products intended to replace the B.P. preparation, and suggested standards for the pharmacopoeial fluid extract and the chemistry of the drug completed the essay. Mr. Tocher remarked that, during the same week (in November last), Mr. F. H. Alcock had published his note to the effect that the distillate from liquid extract of cascara sagrada yields a greasy yellow substance, and slightly coloured crystals; he, by a somewhat different process, obtained a fatty or resinous substance and cubical clear crystals. He had not examined either of the products, but Mr. Alcock reported that the aqueous solution of the crystalline substance becomes crimson on adding ammonia, suggesting the presence of emodin. In the discussion that followed, a member stated that he had been told by a distinguished chemist that some makers of cascara sagrada tablets use extract prepared from immature bark. The bitter principles are partly removed by precipitation, with addition of acid and a little extract of liquorice added to cover the sour taste of the slight excess of acid. Only about one-half of the proper proportion of this extract is used, other innocuous extractive matter being added, and a small proportion of aloin to fortify the "cascara" tablets. Their activity, it was asserted, is mainly due to the added aloin. [We have made some inquiry in regard to this extraordinary statement, which is inconsistent with our own knowledge of the subject, and have interviewed the distinguished chemist referred to, who states that he has "never made any such remarks as those attributed to him, and the statement is entirely without foundation."—*EDITOR C. & D.*] A hearty vote of thanks was accorded to Mr. Tocher for his contribution.

Dewsbury Pharmacists' Association.

A meeting was held on February 7, Mr. R. Broadhead (Batley) in the chair. Messrs. J. Rhodes, G. N. Guttridge, R. Gledhill, J. Day, A. B. Barker, S. N. Pickard, and G. Walker (Hon. Secretary) were also present.

"PHARMACY."

Mr. Gledhill reported upon an interview he had had with Mr. Walter Runciman, President of the Board of Education, relative to the 1908 Act. With regard to the titles question, Mr. Runciman thoroughly agreed with them, and remarked that he considered it was not only a question for the Pharmaceutical Society, but it involved the safety of the public. Mr. Runciman considered that it was misleading for people who were not pharmacists to call their establishments pharmacies. He was in favour of rectifying that anomaly. If the Pharmaceutical Society would introduce a Bill into Parliament with the object of making the title the exclusive right of pharmacists he would give it his hearty support. With regard to the question of poisons, he could not pledge himself until he had consulted the Home Office. Mr. Gledhill, continuing, expressed the opinion that if the Society would prepare a short Bill, leaving out all contentious matter, and confine it to the titles question, it would be taken up by the Government and passed without opposition.

Mr. Barker observed that he had seen Sir Thomas P. Whittaker, M.P. for the Spen Valley, who agreed that they were entitled to the sole title of pharmacy as well as the title of pharmacist, and he said that the public would expect to find a pharmacist in a shop that was described as a pharmacy. Sir Thomas further remarked that a private member's Bill would not have the slightest chance of passing into law, but if the Pharmaceutical Society could get the Government to introduce it, it would go through.

Mr. Gledhill proposed the following resolution:

"That this Society asks the Pharmaceutical Society to try and induce the Government to introduce a short Bill to restrict the word 'pharmacy' to places of business conducted by *bona-fide* pharmacists only."

Mr. Barker seconded the motion, and it was carried.

Mr. Day was appointed to attend the annual dinner of the Harrogate Association on February 11. There was a little conversation as to the whist-drive to be held on February 17.

London Chemists' Association.

A meeting was held at 120 Pratt Street, Camden Town, London, N.W., on February 9, Mr. T. H. W. Idris, the President, in the chair. The members present were Messrs. F. W. Truman, J. C. Pentney, J. W. Green, R. S. Page, C. C. Michie, J. Smith, W. Sharman, J. T. De Peare, and J. Wellesley Douglas (hon. secretary). The first item on the agenda was the consideration of the

UNRESTRICTED USE OF THE PLACE-NAME "PHARMACY."

The following motion by Mr. Truman was discussed:

"That the Pharmaceutical Society be urged to take immediate and joint action with the medical and dental authorities in regard to the matter."

The Chairman, in reviewing the 1908 legislation affecting the practice of pharmacy, said, in reference to complaints now made, that chemists did not know what they had escaped. Limited liability companies formerly legally styled themselves "chemists" without the necessity of employing qualified managers, the title being simply a trade description, and would have become more so in the progress of time. Agri-horticultural poisons were vended in open contempt of the law and in defiance to the Pharmaceutical Society, and there was reason to believe that the Privy Council's regulations would not have been so satisfactory if efforts had not been made to get them modified. The Poisons and Pharmacy Bill was of necessity an agreed one, and it was got through Parliament so quickly that many opponents, such as the grocers, were taken by surprise. The law affecting the word "Pharmacy" had not been altered in the slightest degree by the 1908 Act; but, while the title "Pharmacist" is becoming more valuable, legal decisions have made the descriptive name of "Pharmacy" common property, and made it possible for persons so minded to deceive the public to some extent. The matter had not been lost sight of during the progress of the Bill, but it had been discussed at frequent conferences. It was possible to have obtained a clause restricting the place-name "Pharmacy" to a business controlled by a duly qualified chemist, but their

opponents would not agree to limiting the ownership to a pharmaceutical chemist or chemist and druggist. At the time it was considered that the law would not allow improper use of the place-name "Pharmacy," and it was decided that it was best to allow the matter to remain as it stood. Many pharmacists considered that it was not desirable to proceed further unless the name could be restricted to the place belonging to a pharmacist. Mr. Idris was of opinion, judging by the atmosphere of the last Parliament, that it was not possible to obtain such a restriction, but he considered that it would be desirable to restrict the name "Pharmacy" to the laboratory and workshop of a pharmacist. He agreed with Mr. Truman that the present was the time for action.

Mr. J. Wellesley Douglas failed to find a seconder for a proposal that the Pharmaceutical Society be urged to take concerted action with the medical and dental authorities "to restrict the use of the word pharmacy, or surgery, or dental surgery, or any word descriptive of a place and implying qualified management." Mr. Michie disagreed with Mr. Douglas's suggestion that the name "Pharmacy" be only restricted to businesses under qualified management since limited liability companies could use it. Mr. J. C. Pentney said that, unless the use of the place-name "pharmacy" be restricted to the individual, according to the intention of the recent Act, the use and distinction of the title pharmacist was gone.

Mr. Idris pointed out that the differences between Mr. Douglas and Mr. Michie would be settled by what the medical and dental authorities choose to go to Parliament on. The original resolution was carried unanimously.

PROTECTED PROPRIETARIES.

A resolution was also carried, with one dissident, that the Proprietary Articles' Trade Association take some action with regard to preparations which are protected in theory only, and in regard to colorable imitations of protected articles. Mr. Douglas, in moving the resolution, said he personally opposed the P.A.T.A. because the 4,000 members were making it worth while for 40,000 patent medicine licence-holders to sell proprietary remedies, and thus indirectly also encouraging breaking bulk. The makers of proprietary headache powders issued colorable imitations of their own articles for sale in chandlers' shops, and to avoid P.A.T.A. conditions. Advertised prescriptions containing protected proprietary articles were only protected in theory. Mr. Pentney and others contended that the P.A.T.A. is doing excellent work, and that the P.A.T.A. could not tell chemists at what price to sell their galenicals, but agreed that no harm would be done in sending the resolution to the P.A.T.A. A cordial vote of thanks to the Chairman terminated the proceedings.

Festivities.

Ourselves.

The staffs at our head office, 42 Cannon Street, London, E.C., and a number of provincial representatives, were entertained to dinner at Frascati's, Oxford Street, on Tuesday evening, February 8, at the invitation of Mr. Penry Vaughan Morgan (one of the proprietors of THE CHEMIST AND DRUGGIST), on the occasion of his recent marriage. The company of ladies and gentlemen numbered over 100, and Mr. Henry Walker presided, the chairmen of the spur tables being Mr. George Anderson, Mr. L. H. Quin, and Mr. J. M. Stainforth. After dinner and the loyal toast, the chairman, in a happy speech (with a well sung verse in it), asked the company to drink to the health and happiness of Mr. and Mrs. Morgan, who are at present on tour in Egypt. The other toasts were "The Ladies," given by Mr. Peter MacEwan, and "The Firm," by Mr. J. Ellis Glass. The company then adjourned to another room which had been prepared for whist. There play was enjoyed until shortly after eleven o'clock, when Mr. Gwyn Vaughan Morgan distributed handsome prizes to the winners, namely: Ladies, first, Mrs. J. R. Raper; second, Miss Chorley; third, Miss Hawkes and Miss Selby (equal). Gentlemen, first, Mr. H. J. Weber; second, Mr. W. Chalmers; third, Mr. F.

Ridlington. Thanks to Mr. Morgan and all others who had contributed to a most happy reunion concluded the programme.

Fancy-dress Ball.

The Wellcome Club gave its annual fancy-dress ball in the spacious gymnasium of the Wellcome Institute, Dartford, on the evening of February 4. The floor of the gymnasium was filled with gaily dressed dancers, and a large company viewed the scene from the stage. Considerable ingenuity was displayed in the costumes, many of which were of a highly original character. Prizes, given by Mr. H. S. Wellcome, Mr. G. E. Pearson, Dr. Jowett and the committee, were awarded to Misses M. Monkman, B. Booker, M. M. Wood, Messrs. Simpson and P. G. Hammond.

Whist-parties.

THE Leeds Chemists' Association had an enjoyable party at the Old Bank Restaurant, Commercial Street, on Wednesday evening, February 2. About 120 persons were present. The prize-winners were: Ladies—(1) Mrs. H. Brook; (2) Mrs. Calverley. Gentlemen—(1) Mr. E. Heslegrave; (2) Mr. Leach. Consolation—Miss Howarth and Mr. Armitage. Mr. J. R. Bentley (Secretary) was M.C., and it was largely due to his efforts that the party was so successful.

The Worcester and District Chemists' Association had a whist-drive and dance at the Star Hotel on February 1. About 100 were present, including the President (Alderman Steward, J.P.), Mrs. Steward and party, Mr. and Mrs. C. W. Turner and party, Mr. and Mrs. Coverdale and party, Mr. Aubrey and party, Mr. and Mrs. Acton and party, Mr. and Mrs. Lunn and party, Mr. and Mrs. Haywood and party, Mr. and Mrs. Hall and party, Mr. Perkins and daughter, and Mr. and Mrs. Swanson, all of Worcester; and Mr. Need and party, Mr. Baylis, and Mr. A. S. Clarke, from Malvern. When eighteen games had been played the company adjourned for supper, after which another six games were played. The prize-winners were:

Ladies.—First (Worcester China lizard jug), Mrs. C. W. Turner; second (pair of silver candlesticks), Miss Williams; unknown number (Worcester china vase), Miss A. Jones.

Gentlemen.—First (silver-mounted umbrella), Lieutenant Clarke; second (brass inkstand), Mr. Sievers; unknown number (silver-mounted cigarette-case), Mr. P. J. Roberts.

The dancing was kept up till 2 A.M. All agreed that the evening was the most successful in the Association's history.

The annual supper and whist-drive of the Midland Pharmaceutical Association was held at the Grand Hotel, Birmingham, on February 2. About sixty ladies and gentlemen were present. Among them were Mr. and Mrs. A. W. Gerrard, Mr. J. and Miss Radford, Mr. and Mrs. Jeffrey Poole, Mr. and Mrs. Prosser, Mr. and Miss Lowther, Mr., Mrs. and Miss Cuxon, Mr. and Mrs. T. H. Barker, Mr. and Mrs. Jarvis, Mr. Buckingham (Hon. Secretary) and Mrs. Buckingham. During the interval Mr. Gerrard, in the absence of Mr. A. W. Southall (the President), who, with Mrs. Southall, is on a visit to Switzerland, presented Mr. Radford with a silver rose-bowl and silver centrepiece in recognition of his services as Secretary for over six years. Mr. Radford succeeded the late Mr. Brunt in the office, and Mr. Gerrard attributed in large measure the present satisfactory position of the Association to his strenuous work. He had served under three Presidents—Mr. Jones, Mr. Gerrard, and Mr. A. W. Southall—and had been most diligent in his efforts to promote the success of the Association. Mr. Radford briefly acknowledged the gifts. At a subsequent stage Mr. Gerrard, who acted as M.C. and Chairman, presented the prizes to the winners as follows: Gentlemen—1, Mr. Taylor (Kidderminster); 2, Mr. A. Everton; mystery prize, Mr. Lowther. Ladies—1, Miss Lowther; 2, Mrs. F. Smith; mystery prize, Miss Boraston.

A whist-drive scoring-card and dance-programme combined has been published by Mr. J. S. Snell, chemist, 8 Burnley Road, Accrington. It is a double folding card, with space for twenty-eight hands, the third section of the card setting forth twelve dances. The rules of whist are printed on one section of the card and an advertisement of Mr. Snell's "Pandora Bouquet" on another. Mr. Snell tells us that

he sells the cards at cost to secretaries of clubs and others who require them, and has found it to be a remarkably cheap advertisement. He will send a specimen of the card to any brother pharmacist on receipt of a stamped and addressed envelope.

Colour-blindness.

AN interesting lecture was given on February 9 at the Royal Society of Arts by Dr. F. W. Edridge-Green on "Colour-blindness." Dr. F. W. Mott, F.R.S., was in the chair. At the commencement of the discourse the lecturer outlined the colour theory which he has adopted to explain vision and colour vision. A ray of light impinging on the retina liberates the visual purple from the rods, and a photograph is formed. The rods are concerned only with the formation and distribution of the visual purple, not with the conveyance of light impulses to the brain. The decomposition of the visual purple by light chemically stimulates the ends of the cones (very probably through the electricity which is produced), and a visual impulse is set up which is conveyed through the optic nerve fibres to the brain. The character of the impulse set up differs according to the wave-length of the light causing it. Therefore, in the impulse itself we have the physiological basis of the sensation of light, and in the quality of the impulse the physiological basis of the sensation of colour. The impulse being conveyed along the optic nerve to the brain stimulates the visual centre, causing a sensation of light, and then passing on to the colour-perceiving centre, causes a sensation of colour. But though the impulses vary in character according to the wave-length of the light causing them, the colour-perceiving centre is not able to discriminate between the character of adjacent impulses, the nerve cells not being sufficiently developed for the purpose. At most, seven distinct colours are seen, whilst others see in proportion to the development of their colour-perceiving centres only six, five, four, three, two, or one. This causes colour-blindness, the person seeing only two or three colours instead of the normal six, putting colours together as alike which are seen by normal-sighted to be different. In the highest degree of colour-blindness just referred to, only the colours at the extremes of the spectrum are recognised as different, the remainder of the spectrum appearing grey.

The lecturer then went on to explain the functions of the rods and cones of the retina, and how each rod is surrounded by a rose-coloured substance, the visual purple, which is photo-chemically sensitive to light. The rods and cones project into a thin layer of fluid in which the visual purple is diffused. On being decomposed by light the cones are stimulated, thereby setting up a nerve impulse which causes the sensation of vision. There are two classes of colour-blindness; in the first there is light as well as colour loss, in the second the defect is in the perception of colour. Dr. Edridge-Green has classified the colour blind according to the number of colours which they see in the spectrum—trichromatic, dichromatic, monochromatic—each class including many degrees. To illustrate these varieties the lecturer exhibited on the screen representations of simple outline-pictures painted by colour-blind persons. The upper picture of each slide was the copy, and the one below the result as painted by the colour-blind artist. These showed a number of curious points, and from each could be adduced the class of colour-blindness to which the artist belonged. Passing on to the practical side of the question—the colour-tests used for engine-drivers and sailors—the lecturer showed the uselessness of the official wool-test, and then explained the lantern-test which is associated with the lecturer's name. Persons who can be "educated" to pass the wool-test are easily detected by the lantern. With the lantern the intensity of the colours can be altered, which is an important point when it is borne in mind that a slight haze is often sufficient to alter the colour-perception acuity.

A good discussion followed, during which many appreciative remarks were made concerning Dr. Edridge-Green's work on the subject. Dr. Mott is slightly colour-blind, the defect being first detected when he was endeavouring to "spot" the Koch's tubercle bacillus, which takes a red stain.

Trade Report and Market Review.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are obtained for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at these prices.

42 Cannon Street, London, E.C., February 10.

MARKET conditions have undergone no material alteration since last week, the tone generally being dull, with few new features or important alterations. Opium is still tending easier owing to the absence of important business. Quinine is steady and unaltered. Cream of tartar is firm and shows a tendency to advance. Tartaric acid is unaltered, although raw materials have risen. Citric acid remains dull. The Continental prices for bromides have been amended, showing a slight advance on the smaller quantities. Saffron is substantially higher in Spain. Damiana has been sold at an extreme figure, and higher prices are asked for chaulmoogra oil. British castor oil and shellac are lower. Some cheap lots of menthol changed hands at the close of last week. Cloves have been active at higher rates to arrive and for delivery. Cod-liver oil is firmer, and the catch so far is insignificant. The principal changes are as follows:

Higher	Firmer	Easier	Lower
Ammoniacum	Balsam Tolu	Aloes (Cape)	Annatto seed
Benzoin (Siam)	Camphor	Insect-flowers	Castor oil
Cevadilla	(China crude)	Opium	(British)
Chaulmoogra	Cod-liver oil	Senega	Peppermint
oil	(Nor.)	Senna pods	oil (Jap.)
Cloves	Cream of	(Tinn.)	Shellac
Damiana	tartar		
Ginger (Cochin)	Dragon's blood		
Saffron			

Cablegram.

NEW YORK, February 10:—Business in drugs is moderate. Opium remains quiet at \$5.65 for druggists' by single cases. Cascara sagrada is steady at 7c. Rio ipecacuanha has advanced to \$1.35, and Cartagena to \$1.15. Copaiba is steady at 45c. Balsam tolu is firmer at 20c. Hydrastis (golden seal), asafetida, jalap and peppermint oil are unchanged. Senega is easier.

Heavy Chemicals.

Business in the heavy-chemical market continues steady and of a quietly improving character. Exports are better, and there are more inquiries about for forward delivery. Values are steadily and well maintained, and do not show much fluctuation.

SULPHATE OF AMMONIA is, on the whole, steady, but there has scarcely been a full volume of business doing either on home or export account, nor have dealers been covering their requirements to the same extent as recently. As regards forward delivery, very little is being transacted, as buyers are averse to paying even present prices. Present nearest values: Beekton prompt, 11l. 16s. 3d.; Beekton terms, 11l. 8s. 9d. to 11l. 10s.; London, 11l. 8s. 9d. to 11l. 10s.; Leith, 11l. 16s. 3d.; Hull, 11l. 12s. 6d. to 11l. 13s. 9d.; and Liverpool, 11l. 15s. to 11l. 16s. 3d.

ALKALI-PRODUCE.—There is a good all-round demand in this branch, though here and there contract deliveries have scarcely been up to the average. Bleaching-powder a shade quieter, but unchanged in value at 4l. 2s. 6d. to 4l. 7s. 6d. per ton for softwood casks on rails. Caustic soda, 76 to 77 per cent., 11l. to 11l. 2s. 6d.; 70 per cent., 10l. 5s. to 10l. 7s. 6d.; and 60 per cent., 9l. 5s. to 9l. 7s. 6d. Ammonia alkali keeps moving steadily at unaltered figures of 4l. to 4l. 5s. per ton in bags free on rails. Soda-crystals are in improved request at 55s. to 57s. 6d. per ton free on rails Tyne, and 57s. 6d. to 62s. 6d. per ton f.o.b. Tyne, and 60s. to 65s. per ton f.o.b. Liverpool. Bicarbonate of soda, 5l. to 6l. per ton f.o.b. Liverpool, according to packages. Salt-eake moving well on

contract, but otherwise quiet at unaltered figure of 42s. 6d. per ton. Chlorates of potash and soda rather quiet at 3½d. to 3¾d. per lb., according to quantity, etc. Yellow prussiates of potash and soda are scarcely so firm, and lower figures are being accepted. Potash, 4½d. to 4¾d., and soda 3d. to 3½d. Hyposulphite of soda, in fair average demand and somewhat steadier. Ordinary crystals in casks, 5l. to 5l. 10s. per ton, while deliveries in 1-wt. kegs vary from 5l. 15s. to 7l. 15s. per ton, according to quality and quantity. Silicates of soda, steady. 140° Tw., 4l. 7s. 6d. to 4l. 17s. 6d.; 100° Tw., 3l. 17s. 6d. to 4l. 7s. 6d.; and 75° Tw., 3l. 10s. to 4l. per ton, according to quality, quantity, and destination.

Manchester Chemical-market.

February 8.

There is a rather weaker feeling in heavy chemicals in this centre. Caustic soda, bleaching-powder, ammonia alkali, and soda crystals repeat last week's rates, however. Carbonate and caustic potash are steady, but chlorates are dull. There is a quieter feeling in copper sulphate, but white powdered arsenic is in better inquiry, and ranges from 12l. 5s. to 12l. 12s. 6d. per ton delivered Manchester. Brown acetate of lime is in sellers' favour, and is well held at 7l. 10s. to 7l. 12s. 6d. per ton here. Acids and cream of tartar are quiet, not to say dull. Lead salts are firm. Coal-tar products show little change, but rule steady all round. Sulphate of ammonia is quoted at from 11l. 7s. 6d. to 11l. 8s. 9d. per ton on rails Manchester.

London Markets.

ACID, TARTARIC.—Although there has been an advance in raw materials, the quotations remain substantially unaltered at 10d. per lb. for English and 9½d. for foreign.

AMERICAN DRUGS.—The following are a few of the current prices of barks, leaves, roots, etc., mostly for shipment on "c.i.f. terms to arrive": Barks.—Bayberry, 31s.; black haw of root, 6d.; elm, 4¾d. to 5½d.; euonymus, 1s. 3d.; sassafras, 7½d.; wahoo, 1s. 3d.; wild-cherry, 3½d. to 5½d.; witch-hazel, 5½d. net (spot). Leaves.—Damiana, 2s. 3d.; witch-hazel, 3d. to 3½d.; Truxillo coca, 8d. net (spot). Roots.—Burdock, 4d.; elecampane, 4½d.; gelsemium, 3½d.; leptandra, 7½d.; mandrake, 45s.; sanguinaria, 5½d.; and serpentary, 2s. 2½d. per lb.

ARABOGA.—A small lot recently arrived at Hamburg, testing 55.7 per cent. chrysarobin, has been sold at the equivalent of 2s. 6d. per lb.

BALSAM CANADA.—To arrive 2s. 8d. per lb. c.i.f. is quoted in tins.

BROMIDES.—The Convention of German Bromide makers announce a slight amendment in prices, showing an advance of ¾d. per lb. on lots of under 1 cwt., the price of potassium crystals and/or powder being 11d., sodium 1s. 0¾d., and ammonium 1s. 1¾d., per lb. Previous prices remain in force for lots of 1 cwt. and upwards in one delivery, and for contracts of 4 cwt. and upwards for delivery within four months.

CAMPHOR (REFINED).—Sellers of Japanese 1-oz. tablets quote 1s. 8d. per lb. c.i.f. for February-March shipment, and for 2½-lb. slabs 1s. 6¾d. is quoted.

CEVADILLA-SEED has advanced to 46s. per cwt. c.i.f. for single bags, and slightly less for quantity.

CINCHONA.—Further particulars in regard to the auction to be held at Amsterdam on February 17 show that the 8,061 bales and 762 cases to be offered weigh about 798,850 kilos., containing 46,961 kilos. of quinine sulphate. The manufacturing-bark weighs 693,440 kilos. and the pharmaceutical bark 105,410 kilos., containing respectively the equivalent of 42,903 kilos. and 4,058 kilos. of quinine sulphate. The average percentage of quinine in the manufacturing-bark is 6.19, as compared with 6.29 per cent. in January and 6.54 per cent. in December. The shipments from Java during January amounted to 1,167,000 Amst. lb., against 1,380,000 Amst. lb. in January.

1909. In the London drug auction twenty-two crates of thin Loxa quill, rather uneven, sold at 8*d.*, and country damaged at 7*d.*; 7 bales flat Calisaya were bought in at 8*d.*

CLOVES.—Nothing was offered at auction, but privately the spot market for fair Zanzibar is firmer at 5*d.* A large business was done for delivery and to arrive.

COPPER SULPHATE is unaltered, ordinary Liverpool brands offering for prompt delivery at 19*l.* 15*s.* per ton, and March-April at 20*l.*

DAMIANA-LEAVES continue extremely scarce on the spot, and the price is now a famine one, 2*s.* 6*d.* per lb. having been paid for a small lot, with 3*s.* wanted.

GINGER.—Nothing was offered at auction, but privately business has been done in washed Cochin at 47*s.* for fair, being dearer, and at the close 50*s.* was asked.

HYDRASTIS.—To arrive, 8*s.* 6*d.* per lb. c.i.f. is quoted.

IGNATIUS BEANS.—Arrivals on the Continent have eased prices to 9*g**d.* per lb. c.i.f. for single bags.

INSECT-FLOWERS.—Prices are a trifle lower in Trieste, open offering at 110*s.*, half-closed at 150*s.*, and prime closed at 200*s.* per cwt. c.i.f.

KINO.—There appears to be a lack of fair Cochin grain offering, 6*d.* per lb. being asked for common, without astringency.

LYCOPodium.—Quiet. Treble-sifted quality, in lots of at least 3 cases, is offered at 1*s.* 6*g**d.*, c.i.f. terms.

MACE.—Quiet. At auction 4 packages West Indian offered and sold at 1*s.* 8*d.* for fair red, 1*s.* 7*d.* for good pickings, and 1*s.* 4*d.* for broken.

MASTICH.—The price of fair tears remains at 2*s.* 2*d.* per lb.

MENTHOL.—Towards the close of last week about 30 cases Suzuki and Yazawa changed hands, including spot at 8*s.* 4*d.* and to arrive near at hand at 8*s.* 1*d.* per lb. c.i.f. These parcels are said to be now in firm hands, and 8*s.* 6*d.* is asked on the spot. Meanwhile Japan continues to quote 8*s.* 10*d.* c.i.f. from first hands. In auction five cases Kobayashi and three cases Suzuki were bought in at nominal rates.

OIL, CASTOR.—Hull make is 5*s.* per ton lower, first-pressing offering at 27*l.* per ton in barrels for either prompt, February-June, or July-December, delivered free on wharf London.

OIL, CHALMOOGRA, is dearer, holders asking 1*s.* 8*d.* to 1*s.* 9*d.* per lb. spot, and slightly less for shipment.

OIL, COD-LIVER.—Our Bergen correspondent writes on February 7 that during the past week the weather was very stormy in the North, and the catch of cod was rather insignificant. The reports to date are as follows:

	1910	1909	1908
Catch of cod (millions) ...	2.8	2.2	2
Yield of cod-liver oil (barrels)...	1,950	1,800	2,150
Livers for "raw" oils (net.)...	2,160	1,780	1,503

It has now become evident that the liver this year is smaller and leaner than during the two foregoing years. This year in Lofoten 300 to 400 livers are required to fill an hectolitre, against 250 to 300 in 1909 and 1908, and the oil-percentage is only 40 to 50 per cent., against 50 to 55 per cent. From other fishing places the reports are still worse. On the market a decidedly firmer tendency has set in, and to-day a lot of 1910 oil realised 79*s.* per barrel, c.i.f. terms; and for 1909 oil 76*s.* per barrel c.i.f. was offered. The exports from Bergen up to date amount to 1,115 barrels, against 1,421 barrels at the same date of last year. The oil will probably not be so pale and bright this year, as is usual when the liver is poorer in yield.

In London prices are much firmer, agents quoting 76*s.* per barrel c.i.f. for new oil for February-March, and the same figure for old for immediate shipment.

OIL (TURPENTINE) is about 9*d.* lower on the week, American on the spot closing at 41*s.* 6*d.*, and March-April at 42*s.* per cwt.

OPIMUM.—A continued weakness is evident in primary markets owing to the absence of important business, and, correspondingly, prices on the spot are also easier, with Turkey druggists' obtainable at 16*s.* 6*d.* per lb. Writing on January 28, a Smyrna correspondent states that the sales amount to 16 cases extra selected t.q., two cases

Yerli, and six cases old current qualities for the U.S.A. Mild rainy weather is prevalent, with snow in the upper districts, which is good for the poppy-plants. The stock of good eligible material is much reduced, and what remains is in firm hands. The arrivals amount to 1,869 cases, against 2,003 cases at the same period last year. Another correspondent, writing on January 29, states that the sales comprise 14 cases extra choice at piastres 153 to 155, or 16*s.* 10*d.* to 17*s.*, and six cases old seconds, about 9½ per cent., at piastres 135, or 14*s.* 11*d.* per lb. c.i.f. The absence of large buyers has led to depression, and several holders have been obliged to accept reduced prices. Another Smyrna correspondent, writing on February 1, states that the past week would have been very busy had holders proved less exacting. Certainly, as has already been pointed out, the stocks are small, but the coming crops promise well, which should cause holders to reflect. All the same, though our opinion is towards a fall, and this opinion is general, we do not think that large holders will sell at lower prices, as from now to the new crop a period of five months must elapse. The sales amount to 14 cases new extra Karahissar at 16*s.* 10*d.*, two cases Yerli at 16*s.* 9*d.*, and six cases old extra Karahissar at 14*s.* 7*d.* per lb. c.i.f. Market closes weak. In the course of a German review on the opium market during January, it is stated that although a few owners showed a readiness to make concessions, buyers held aloof from the market. Of the large holders, nothing has transpired to indicate yielding on their part; how far they are right in their attitude the future will show. The demand for morphine and codeine continued remarkably small during January, causing prices to give way here and there.

The Board of Trade returns for January, under the heading of "Medicines exported," give a new entry—"Opium: dried and powdered in the United Kingdom"—the exports of which for the month were *nil*. What little opium is dried and powdered here and afterwards exported, is sent to the United States, in order to obtain admission at a lower duty, so that the new entry does not appear to serve any useful purpose.

Writing on February 4, a Smyrna correspondent reports that the week passed without business. Some weak holders may be induced to make fresh concessions, but, owing to depleted stocks, large holders firmly adhere to previous top figures. The interior reports favourably as regards the crop, but there are still many risks ahead. The arrivals to date amount to 1,885 cases, against 2,009 cases.

PEPPER (BLACK).—At auction 63 bags Ceylon were bought in at 4½*d.* Privately prices are unaltered; fair Singapore offering on the spot at 4½*d.*, with sellers of February-April and March-May at 3½*d.*

PEPPER (WHITE).—At auction 47 cases Singapore were bought in at 9*d.* for superior washed. Fair in bags was taken out at 7*d.*, and good Muntok at 7½*d.* Privately the market remains slow, with sellers of fair Singapore on the spot at 6½*d.*, and to arrive, January-March shipment, the value is 6½*d.*

QUICKSILVER.—Steady at 9*l.* 10*s.* per bottle and 9*l.* 7*s.* from first- and second-hands respectively.

QUININE.—At the auction at Amsterdam on February 4, the Amsterdam Quinine Works offered and sold 1,417½ kilos. Ed 11. at an average price of fl. 11, against fl. 11.08 at the previous auction. The next auction will be held on February 25, and will also consist of 1,417½ kilos. The London market for sulphate remains steady at 7½*d.* for German from makers, 7½*d.* for second-hands, 7½*d.* for Amsterdam, and 6¾*d.* for Java.

SAFFRON is dearer, the Spanish market having advanced by about 4*s.* per lb. The crop is now over, and although no actual figures of the output can be given, it has been ascertained that it is much below the average; hence the higher pretensions in Spain. On the spot, finest Valencia of B.P. quality is quoted 34*s.* 6*d.* per lb. net, with a rising tendency.

SENEGA is slightly easier, according to cables received from New York, and 2*s.* 5*d.* net has been paid on the spot, and sellers.

SHELLAC.—At auction on Tuesday the large supply of 894 cases was offered, and practically 700 cases sold, mostly without reserve, at lower prices, TN orange being 2*s.*, and

Button 4s., cheaper than previous auction rates. The prices paid include fine bright orange at 84s.; good flat free, 81s.; good seconds, flat free, 73s. to 76s.; pale curly broken free, 72s.; palish dull, 70s.; bright red broken free, 69s. to 70s.; bronze free, 73s.; TN, superior free, 67s. to 68s.; dullish to good red flat free, 63s. to 66s.; fair red matted to slightly matted, 64s. to 65s.; broken red, slightly matted, 63s. AC Garnet: Slightly matted, 65s. to 66s.; Ralli second free, 43s. Stamped pure Button firsts, 77s. to 78s.; dark, 70s.; firsts, slightly cakey, 75s.; ordinary cakey to blocky ditto, 58s.; good seconds ditto, 61s. to 63s.; ordinary ditto free, to slightly cakey, 55s.; ordinary to fair dark, slightly cakey, 36s. to 46s. per cwt. Privately the spot value of TN orange is now 65s. to 66s.; and for arrival TN for February-March shipment has been sold from second-hands at 66s. to 65s. c.i.f. Futures have been dull, the sales including March delivery at 68s. to 67s., and May at 70s. to 68s. 6d.

SPERMACEIL.—English refined ex warehouse is quoted 1s. 2d. per lb.

TAMARINDS.—East Indian are offered at 12s. 3d. per cwt. c.i.f.

London Drug-auctions.

At the auctions of new and old drugs the demand on the whole was good. Cape aloes sold at a decline of 6d. to 1s. per cwt., and for ammoniacum higher rates were paid. Annatto-seed was easier, and for good asafetida very full prices were paid. Buchu is a shade easier, and balsam tolu is dearer. Sumatra benzoin is quite neglected, the interest being confined to Siam, which realised a substantial advance. Malabar cardamoms were easier, and Mysore were about steady. Coca-leaves were quiet. Cascara sagrada apparently sold at a low figure for common. Dragon's-blood was in strong demand at advancing rates, and good lump is now scarce. Gambogo was in slightly more inquiry, but all descriptions of honey are neglected. Ipecacuanha is very firmly held. Myrrh and nux vomica were dull at sale. Rhubarb remains easy in tone, and the demand for sarsaparilla is extremely small. Tinnevely senna of mostly common quality sold at unaltered rates. Beeswax was exceedingly dull. The following table shows the amount of goods offered and sold:

	Offered	Sold		Offered	Sold
Accroides.....	71	0	Gentian.....	20	0
Aconite (Jap.).....	22	0	Guaiaacum.....	1	1
Aloes—			Gum arabic.....	72	31
Cape.....	64	41	Henbane.....	4	0
Socotrine (kegs).....	38	0	Honey—		
Zanzibar (cs.).....	26	7	Australian.....	39	0
Ambergris (pcl.).....	1	0	Chilian.....	12	0
Ammoniacum.....	11	8	Jamaica.....	64	2
Aniseed (Russ.).....	20	10	St. Lucia.....	53	10
Annatto-seed.....	45	35	Insect-flowers.....	1	0
Areca.....	17	0	Ipecacuanha—		
Asafetida.....	278	53	Cartagena.....	5	3
Balsam—			Matto Grosso.....	7	1
Peru.....	14	0	Minas.....	7	0
Tolu.....	4	4	Jalap.....	5	0
Belladonna root			Kamala.....	3	0
(Eng.).....	30	0	Lime-juice.....	10	0
Benzoin—			Mastich.....	2	0
Siam.....	35	22	Menthol.....	8	0
Sumatra.....	208	0	Milk-sugar.....	10	10
Buchu.....	4	1	Myrrh.....	77	0
Camphor (Ch. cr.).....	5	0	Nux vomica.....	207	*7
Canella alba.....	9	4	Ou—		
Cannabis indica.....	9	0	camphor.....	31	0
Cardamoms.....	332	163	cinamon.....	8	8
Cascara sagrada.....	503	503	citronella.....	21	0
Cascarilla.....	37	0	eucalypt.....	60	0
Cashew-nuts.....	161	1	lemongrass.....	10	0
Cassia fistula.....	20	0	lime.....	4	0
Castoreum (cs.).....	1	0	orange.....	16	0
Chiretta.....	30	0	peppermint.....	17	17
Cinchona.....	49	29	Olibanum.....	11	0
Civet (hrns.).....	3	0	Opium.....	4	*1
Coca-leaves.....	71	10	Orange-peel.....	66	5
Cochineal.....	1	1	Orchella-weed.....	85	0
Colocynth & pulp.....	30	3	Orris—		
Copaiba.....	18	0	Mog.....	18	0
Cumin-seed.....	32	0	Quillaia.....	50	0
Cuttlefish-bone.....	75	0	Rhapontica.....	6	0
Dragon's-blood.....	29	13	Rhatany.....	4	0
Ergot.....	10	5	Rhubarb—		
Fennel-seed.....	10	0	China.....	60	19
Gamboge.....	30	7	Sandalwood chips.....	50	0

Offered Sold

Sarsaparilla—		
Guat.-Mex.....	11	0
Honduras.....	5	0
Lima.....	22	0
Native.....	25	6
Seedlac.....	58	0
Senna and pods—		
Alex.....	51	20
Tinnevely.....	552	469
Squill.....	7	7
Sticklac.....	141	0
Tragacanth.....	5	5

* Sold privately.

Offered Sold

Turmeric.....	3	3
Wax (bees)—		
Australian.....	25	25
Chinese.....	2	0
East African.....	26	0
East Indian.....	117	0
Jamaica.....	17	0
Madagascar.....	153	0
Morocco.....	16	0
Nyasaland.....	3	0
Zanzibar.....	10	10

ALOE, CAPE, was about 6d. to 1s. easier. Mossel Bay (on 20 per cent. tares) sold as follows: Fair to good hard bright firsts, 32s. 6d. to 33s.; fair seconds, slightly drossy, 31s. 6d. to 32s.; ordinary dull, slightly drossy and broken, 30s. 6d. to 31s. per cwt. A parcel of 12 cases Zanzibar offered and a few sold at 60s. subject, for fair rather mixed and for tins in cases from 35s. to 48s. subject was paid for very soft and partly drossy.

AMMONIACUM sold at higher rates, seven bags of small to bold free pale tear sold at from 73s. to 73s. 6d., and for the scrapings of bags 10s. was paid; three bags had been sold privately.

ANNATTO-SEED.—Cheaper; 35 bags Ceylon of fair bright colour changing hands at 2½d. per lb.

ASAFETIDA.—The moderate quantity of 261 packages was offered, of which about half had been picked over to make suitable for the American market. About 60 boxes of this sold at irregular but full rates, varying from 9l. to 10l. 10s. per cwt. for mostly loose (but not tears) greyish almondy to good broken pinky block, part loose.

BALSAM TOLU is scarce and firmer, four cases of hard, slightly drossy in large tins selling at 10d. per lb. There is little now in first-hands, and to arrive 10d. c.i.f. is wanted.

BELLADONNA ROOT.—Thirty bags English were bought in at 55s.

BENZOIN.—Dearer for Siam, a new parcel of 33 cases of which elicited keen competition, owing to scarcity, and the bulk (except fine which was brought in) sold at an advance (as compared with prices paid last October) of about 2l. 15s. to 3l. on pea-size almonds, and one of about 20s. on grains. Eight cases of pea-size almonds of good flavour sold at from 11l. 15s. to 12l. 5s. Six cases of pale pea and bean size, part shivery block, realised 14l. 12s. 6d. to 14l. 15s.; seven cases of small dusty grains, part blocky, sold at 6l. 2s. 6d.; and one case garblings at 5l. 2s. 6d. per cwt. Six cases of small to bold free almonds, slightly mixed with dark, were bought in at 23l., the value being 22l., the highest bid being 18l. Sumatra gum was neglected, good almondy seconds being held at from 7l. 15s. to 8l.

BUCHU.—Easier. Only four packages were offered, one of which sold at 2s. 3d. for fair, round greenish, the remainder being bought in at 2s. 6d. The *Norman* has brought 32 packages.

CANELLA ALBA.—Four casks of low dark sold at 42s. 6d. per cwt. subject.

CARDAMOMS.—About half the offerings sold at somewhat irregular prices, Mysore being steady and Malabar easier, the following rates being paid: Ceylon-Mysore, medium to bold yellowish pale, 2s. 4d. to 2s. 5d.; bold long dull to palish, 2s. 4d. to 2s. 5d.; bold and medium palish to pale, 2s. to 2s. 1d.; medium and small palish to pale, 1s. 7d. to 1s. 9d.; small pale, 1s. 4d.; bold pale splits, 2s. 1d.; medium pale split, 1s. 6d.; pickings, brown and split, 1s. 2d. to 1s. 3d.; good seed, 1s. 7d.; grey, 1s. 6d.; Ceylon-Malabar, small to bold unbleached (20 cases), 1s. 2d. to 1s. 3d.; round (Mangalore character), medium palish, partly split, 2s.; small to medium, 1s. 10d.; small round split, 1s. 7d.; common pickings, 1s. 2d.; pale grey seed, 1s. 6d. A pile of 26 cases Tellicherry was held at 1s. 5d. for fair small to medium brown. Native wild fair (four cases) sold at 1s. 8d. to 1s. 9d.; common lean, 6d.

CASCARA SAGRADA.—In auction 502 bags were offered without reserve, and 88, consisting of fair small quilly, imported in 1906, realised 34s. For the remainder, consisting of very dark, coarse, thick bark, from 34s. to 35s. 6d. was paid. Privately ton lots are quoted 38s. net, no tare, on the spot,

and at least ten ton lots are offered at 32s. c.i.f. February-April steamer shipment from the Pacific Coast.

CASHEW NUTS.—Small sales were made at 48s. per cwt. for clean without husks.

CASSIA FISTULA.—For 20 baskets of fair fresh Java pod 15s. was wanted, an offer of 14s. being refused.

COCA-LEAVES.—Steady. Ten cases of fair greenish Ceylon Huanoco sold at 11d. per lb.

COLYCYNTH.—Small to bold dullish Turkey apple was bought in at from 9d. to 10d., and three cases of low broken apple sold at 2½d. per lb., without reserve.

COPAIBA.—Eleven cases of cloudy (guaranteed to pass the B.P. Codex test) were limited at 1s. 9d.

DRAGON'S-BLOOD has been in brisk demand at full to firmer rates. Two cases good reboiled Singapore lump and five cases slightly inferior ditto and false packed had been sold privately at 11l. 10s. per cwt. A case of bright virgin seedy lump sold at 8l., and for six cases fair, part seedy, 7l. 15s. subject was paid. Other sales included two cases fair reboiled at 9l., and two cases common damp at 6l. Practically all good reboiled has been cleared off the market.

ERGOT.—Privately new crop Russian for prompt shipment is quoted 1s. 4½d., and February-March shipment at 1s. 4d. c.i.f. Spanish is unchanged at 1s. 6d. c.i.f. for at least half-ton lots. In the drug auction five bags fair sound Russian sold at from 1s. 3½d. to 1s. 4d., without reserve.

GAMBOGE was plentiful and partly sold at steady prices, including four cases of fair bright Siam pipe at from 13l. 10s. to 13l. 12s. 6d.; for good bright pipe 14l. was wanted. Three cases of common dark Saigon pickings sold without reserve at from 60s. to 75s. Eleven cases have arrived from Singapore and ten cases *via* Havre.

GUAIACUM.—A single case of fair, slightly drossy block sold at 3½d. per lb.

GUM ARABIC.—Twenty-one bags of small dusty Ghezireh sorts sold without reserve at 19s. per cwt., and 10 bags palish soft Soudan sorts had been sold privately.

HENBANE.—Four bales fair were held for 40s., gross for net, no discount.

HONEY.—Quite neglected. Two barrels of setting brown Jamaica sold at 25s., and for ten cases of brownish set and setting St. Lucia 26s. per cwt. was paid.

IPECACUANHA.—Firmly held. Privately holders quote 7s. 2d. to 7s. 3d. for Matto Grosso. In auction only five bales of this description were offered, and bought in at 7s. 6d. per lb. A single bale of lean Matto Grosso sold at 7s. Cultivated Minas was held at 7s. A bag of Cartagena pickings sold at 4s. 6d., and for three bags of fair grey 5s. 2d. was paid, an advance of about 5d. on previous sale rates.

JALAP.—Five bags from small to bold (foreign analysis 14.7 per cent. resin), were held at 1s. 9d. Privately 1s. 4d. per lb. c.i.f. to arrive is quoted.

MILK-SUGAR.—Ten cases Italian powder sold cheaply at 36s., no allowances or discount.

OIL, CINNAMON LEAF.—Six cases of Ceylon leaf sold without reserve at 1½d. per oz. for muddy.

OIL, EUCALYPTUS.—Ten cases (69 per cent. B.P.) were bought in at 1s. 2d., and for 76 per cent. 1s. 1d. was asked for 10 cases.

OIL, PEPPERMINT.—Seventeen cases Japanese (Kobayashi) sold without reserve (wrappers slightly rust-stained) at 5s. 4d. to 5s. 5d. (one lot 5s. 6d.) being cheap.

ORANGE-PEEL remains cheap; four bales dull strip of new crop realised 5d. per lb., and for a bag of common dark, without reserve, 4d. was paid; other parcels were bought in at from 6d. to 7½d. per lb.

RHUBARB.—Quiet. Common small to bold round dull-coated horny high-dried, half fair fracture, half grey and dark sold at 5d.; small round ditto with three-quarters pinky fracture at 5d. to 5½d., and small to medium round, with three-quarter very fair pinky fracture, at 6¾d. Canton pickings, part rough and spongy, half pinky and half grey and dusk realised 11d. per lb. Good Shensi druggists trimming root with three-quarters nice bright pinky fracture was limited at 2s. 6d. Two cases of bold,

heavy, round Shensi, with three-quarter good pinky fracture, sold at 1s. 8d.

SARSAPARILLA.—Quite neglected. Twenty-two bales of Lima Jamaica were offered and bought in at from 1s. to 1s. 1d. for common rough to fair. Native Jamaica was also dull, six bales changing hands at from 10d. to 11d. for dull yellowish to fair red; good red was held at 1s. A further ten bales Native Jamaica were bought in at 11d., and for eleven bales of Guatemala and Mexican mixed a bid of 7d. was refused. Privately Mexican is quoted 4½ per lb. c.i.f. for lots of at least five bales. The spot price is 4¾d. net and Honduras 1s. 9d. c.i.f. to arrive.

SENNA.—Taking the low quality into consideration the prices paid for Tinnevely leaf showed no material alteration. Common small yellowish leaf sold at from 1d. to 1½d., and ordinary ditto 2d. to 2½d., and a few bales fair bold greenish at 3½d. subject. Pods, 2½d. to 2¾d. for dark to fair. Eleven bales ordinary broken Alexandrian leaf sold at 2½d. per lb.; dark pods were held at 4½d., and fair palish at 6¾d.; nine bales siftings sold at 2d. to 2½d.

SQUILL.—Seven bags of ordinary dry reddish sold without reserve at 1d.

TURMERIC.—Three bags Madras, all that offered, sold without reserve at 17s. 6d.

WAX, BEES.—Dull. A string of 154 packages Madagascar was bought in at from 6l. 17s. 6d. to 7l., and for ten bags Zanzibar 7l. was paid for fair rolls part dark, and 6l. 12s. 6d. for slightly wormy and dark. White bleached Calcutta was bought in at from 7l. 10s. to 7l. 15s. A string of 25 cases common adulterated Australian sold with all faults without reserve at from 48s. to 49s., the bulk at the higher figure. Seventeen packages Jamaica were held at from 7l. 17s. 6d. to 8l., but the quality was mostly below fair on the whole; bids of 7l. 12s. 6d. were refused for several lots. Several lots of Bombay wax were held at 6l. 5s. per cwt.

Continental Drug and Chemical Markets.

AMYL PREPS.—The few existing makers have formed a convention, and prices have been raised by 5m. per 100 kilos. Recent quotations of amyl alcohol were 225m. to 245m., while amyl acetate is quoted at 205m. and 225m. per 100 kilos. for technically pure and chemically pure respectively.

ARABOBA.—Owing to the recent fall in prices, only small supplies have come on the market, but as the consuming demand has continued, prices have improved, and for a few lots of 500 kilos. 4.75m. per kilo. has been paid from first-hands. A further advance is anticipated, so that chrysarobin may follow.

CITRIC ACID.—The present situation in Italy is as confused as it is possible to be, and until a change takes place trade in citric acid will be confined to actual necessities. Spot (Hamburg) goods follow the tendency of the market for delivery, and a fall in quotations on the spot may be anticipated. This, however, may be succeeded at any moment by an advance, due to scarcity.

ERGOT.—The Hamburg demand has somewhat decreased, and quotations are easier. Good Russian is quoted at from 2.95m. to 3m. per kilo., and Spanish is not offered. Russian holders are reserved, but at the same time it may be possible, with a firm order in hand, to buy at 2.90m. per kilo.

GALLIC ACID.—The situation is so depressed that manufacture is only carried on at a loss. Works have been closed, and it is doubtful whether existing makers will be able to continue working at present prices. A convention may eventually be formed. The quotations are from 325m. to 350m. per 100 kilos.

KOLA has been in increased demand in Hamburg, and, as the crops in Africa are reported to be at an end, no fresh supplies are expected. Stocks in second-hands are by no means large, so that a further advance is anticipated. Good sound African quarters are offered at 60m., and halves at about 65m. per 100 kilos.

LYCOPodium.—It would appear that stocks both in Hamburg and Russia are considerable, and cases are quoted 3.30m. and bags at 3.20m. per kilo. ex Hamburg warehouse. The U.S.A. has not been a buyer for some time past.

QUILLAIMA is very quiet, and little is being done at present rates. Lower offers were cabled for shipment but were refused, which proves that Valparaiso, the staple market, is not so dull as was imagined.

THYMOL is very steady, and the situation has somewhat hardened recently, owing to unfavourable reports concerning new raw material. Recent quotations were 13m. per kilo. for large quantities, but a further rise is confidently expected.



Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they are not recorded. Queries by subscribers on dispensing, legal, and miscellaneous subjects pertaining to pharmacy and its allied trades are replied to in these columns, if they are of general interest. Letters submitted to the Editor for publication (if suitable) should be written on one side of the paper only. Their publication in the "C. & D." does not imply our agreement with the opinions of the writers.

The Chemist in Fiction.

SIR,—The "Winter Issue" reference to "Madame Bovary," under the above heading, leads to conjecture as to how many of his British fellow-craftsmen had previously made the acquaintance of the immortal Homais. The modern chemist is a man of little leisure, and the nature of his work is such as to give small cause for wonder if his recreation is more commonly found in the billiard-rooms, the music-halls, and those theatres at which the peptic class of plays is produced, rather than in the more exacting pursuit of literature, especially of the tragic kind. It is worthy of note that, when Madame Bovary is dying, Homais wishes to take his children to her bedside, in order that they may become "accustomed to great occasions." Here he expresses one of the main justifications of tragedy; but the average British chemist, in common with his fellow-countrymen generally, has little sympathy with such Spartan notions, and the writing of tragedy is becoming a lost art here. Nevertheless, it is the tragic writer who has paid most attention to the members of our craft. True, it is almost always cupboard love that he has shown us—if there is an apothecary introduced into a work of fiction you may be sure that the author has an eye on his poison cupboard, and sooner or later it will mean more work for the coroner. But these chemists of romance usually exhibit small concern for the coroner. There is a typical instance in Stephen Phillips's "Paolo and Francesca," where the old apothecary says:

"I will not sell to murder.
But unto any weary of their life
I sell a painless issue out of it."

Scarcely a workable principle nowadays! This poison-selling specialist is more or less of a stock figure in romance. He is usually depicted as a man well on in years and addicted to miserliness. The ranks of pharmacy are not lacking in pessimists nowadays, but they have not seen nor imagined anything so wretched as the apothecary in "Romeo and Juliet," described as follows:

"Famine is in thy cheeks,
Need and oppression starveth in thy eyes,
Contempt and beggary hang upon thy back,
The world is not thy friend, nor the world's law;
The world affords no law to make thee rich,
Then be not poor, but break it and take this."
[Payment for poison.]

Farewell; buy food, and get thyself in flesh."

Of course, there is much else in literature to specially interest chemists besides imaginative pictures of their fellow-craftsmen of various times and countries. The work of men such as Henrik Ibsen and H. G. Wells, whose early life was devoted to pharmacy, provides an engrossing subject for study with a view to estimating the effect of these early experiences upon their writings. Dr. Rank in "A Doll's House" and Oswald Alving in "Ghosts" might well be artistically moulded memories of Ibsen's early days as an apothecary's apprentice at Grimstad, of which some interesting details are given in the biography by H. Jaeger. The work of H. G. Wells will be familiar to many readers of this journal, in particular one of his most recent books, "Tono Bungay"—the one most peculiarly interesting to pharmacists. There is another class of authors which might also claim:

our special interest: those who have been addicted to drug habits. The pre-eminent example of this class is, of course, De Quincey, whose "Confessions of an English Opium Eater" should be on the bookshelf of every literary chemist.

It is the pharmacist's lot to spend long days in his shop. Is it not worth while for him to read such things as Robert Browning's poem, "The Laboratory," and thereby have his eyes opened to the fact that his surroundings are not so drab as he previously thought? Is it not worth while for him to cultivate an imaginative insight into the lives of his fellow-men? Surely imagination and insight are not to be despised, even as business assets.

Yours faithfully,

Liverpool, February 5.

O. WADDINGTON.

Rumex Ecklonianus.

SIR,—The report in the *C. & D.*, December 25, 1909, from the Wellcome Laboratories on the herb *Rumex Ecklonianus* is interesting. This plant is known by Kafirs as *i-Dololenkanyana*—i.e., calf's knee—and the roots of it are chewed by them as a remedy for tapeworm. From the number of principles isolated may now possibly be determined the one which in this polypharmic root acts as an anthelmintic.

Faithfully yours,

Vrede, O.R.C., January 16.

E. LANGHAM.

"Regular Apprenticeship."

SIR,—My attention has been drawn to a leader in your last week's issue, in connection with the apprenticeship case, wherein you suggest that the Drug-stores Association might have provided counsel. I wish to state that the defendant in this case was not a member of our Association, otherwise we should very probably have defended the action, as it raises a most important point affecting a number of our members. I must take exception to your statement that there are very few members of our Association who could prove apprenticeship. On the contrary, the majority of our members have been apprenticed by indenture.

Yours faithfully,

ALF. DOBSON,

Secretary the Society of Drug Store Proprietors of
Morley, February 8. Great Britain.

[It is well when letter-writers have their attention drawn to the subjects they write about that the attention should observe accurately. "Comparatively few drug-store keepers can produce indentures of apprenticeship to qualified chemists or apothecaries," was our statement, and we did not make the statement that Mr. Dobson attributes to us.—*EDITOR C. & D.*]

Apothecaries' Assistants' Examination.

SIR,—In your Supplement of February 5 I read with much surprise an account of one of the examination papers given to a candidate at the exam. held in January last at the Apothecaries' Hall, in connection with the above. If this is a fair sample, then, to my mind, the examination is not one of the easiest. Most of the chemistry is quite advanced. I believe the rule is that on attaining the age of eighteen years one is entitled to present oneself for examination. I would say that were any person of that age successful in such an exam., he or she would rightly be considered clever. One does not expect it to be a "walk-over," but certainly the syllabus does not give one a clear idea of the knowledge required. Considering the qualification it carries (one not to be compared with that granted by the Pharmaceutical Society), the examination is much too advanced, and, as before stated, the syllabus is not sufficiently adhered to. With a little extra knowledge one could take the "Minor" (especially if the "Prelim." had been done), and in so doing have every chance of success. I believe the average number of candidates who pass the first time is very small, some having to go up as many as six times.

February 9.

J. RANDOLPH CARTER.

Subscribers' Symposium.

(Information Solicited or Supplied.)

Teeth by Instalments.

Could any of your readers give information re supplying artificial teeth on instalment system, and usual methods adopted in a working-class district?—X. Y. Z. (65/14.)

Medical Inspection of School-children.

I should be obliged if some of your English readers would kindly let me have some idea as to how the medical inspection of school-children is working under the Act, particularly in the counties.—A. S. Weir (Kemnay).

Arabian Oil.

D. H. B. (68/21), writing further in regard to this article (*C. & D.*, January 29, p. 201), says: "That rhodium oil is not the article is proved by my being asked for it and Arabian oil by the same person at the same time. Arabian oil, as I have sold it, is a mixture of rhodium, santal and cumin, diluted with almond oil. I sold some lately, and it occurred to me that some might have a recipe for it, hence my query."

The Latest from the Midlands.

Mr. Bell, of Stapleford, Nottingham, sends us the following little dialogue, which took place lately in one of his shops:

Dirty Small Boy: "Is this 'ere chemist?"

Pharmacist: "Yes, my boy."

Boy: "Best chemist?"

Pharmacist: "Yes, the best chemist."

Boy: "Well, a epperth o' Spanish juice, then."

More Appreciations.

I cannot speak too highly of the *C. & D.* The man who wants to get on as a chemist cannot do without it.—W. H. M. (35/68).

I was pleased to be among the successful competitors, but, putting that on one side altogether, each year makes it more and more clear to me that the chemist (in business or out) cannot afford to be without your journal.—Ernest M. Mellor.

I enclose you M.O. for 10s., my subscription to the *C. & D.* for 1910. The *C. & D.* arrives here very regularly every mail, and makes very interesting reading. It is a means of keeping us "pill-pounders" in exile more up to date.—James McKenzie (Singapore).

I beg to acknowledge receipt of my share of the postcard competition. I have been a subscriber since 1897, and read the *C. & D.* as apprentice for six years previous to that. It is not the first time I have had a P.O. from you, as I find going in for the competitions is instructive as well as remunerative.—W. Dennis.

Please allow me to thank you most sincerely for my portion of the prizes awarded in the *Diary* competition, received this morning. I always take a great interest in these and other of your competitions, and whether I win a prize or not, I always feel amply repaid by the pleasure it has given me in competing. I feel I should like to congratulate you most heartily on the all-round excellence of the Winter Number. I think the special articles were most interesting, and, if the hints given are properly digested, cannot fail to be profitable to all retailers.—Spencer H. Platten.

Prescribing by Advertisement.

In our local newspaper a paragraph on "How to Destroy the Dandruff Germ, by a Specialist," has been appearing. We give "the prescription which an eminent scientist and specialist states he has found, after repeated tests, to completely destroy the dandruff germ. This prescription can be made up at home, or any chemist will put it up for you: 3 oz. bay rum, 1 oz. lavona de composee, ¼ dram menthol crystals. Mix thoroughly," etc. There have been a good many inquiries for the hair-wash, but chemists are taking up different attitudes in regard to it. Some point out to their customers that it is not, as they suppose, disinterested advice, but an advertisement, and advise them to complain to the publisher that the paragraph is not marked "Advt." Others recommend, when the price is objected to, that lavona de composee be omitted. Some chemists charge 2s. for the lotion without the perfume, others ask 2s. 6d. Lavona de composee is H.A.T.A. at 1s. 6d., and the complete lotion at 2s. 11d. as Parriet Meta Hair-tonic. What is the general practice of chemists throughout the country?—Pharmakos (66/64). [Postcards are suitable for symposium replies.]

"Unqualified" v. "Unregistered."

Justice (69/9) writes on two sides of the paper, but the first part of his letter sufficiently shows his grievance, and we give it as he writes it:

"Can you in your valuable Paper assist the Lot of the *Un. Registered. Reg Men* in many cases regard the P.J. as their Official Paper, yet they buy the *C & D.* I myself always looked upon the *C & D* as a Mutual Friend to both *Reg & Un Reg.* What do you call a Man who being from leaving *School* in a *Chemists Shop* yet having no signed agreement of *Apprenticeship* only *Verbal* then he takes a Post as *Assistant* to another Chemist 3 years or so, then goes to another. After manager two separate *Branch Shops* for *Reg Men* selling *Li Opui Etc* A man now *Advertises* 20 years *Assistant & Manager* to Mr So & So

Chemist not ½ mile away, he has his own *Drug Store* through this late Act coming into *Operation* What is that man. At present your *C & D* & P.J. say *Un qualified* That cannot be true as both the men have had entire charge of seperate *Businesses* & that fact shows their *Qualification.* Another *Case* one man has been a *Traveller* passes his *Minor Etc* which is the better man Ho or one who has never left the *Business.*"

"Unqualified" is usually employed in the sense of "un-registered," but meanings have been getting mixed latterly, "duly qualified" and "certificate of qualification" being officially regarded not as referring to qualification by examination, but to registration for the current year. A person who has not qualified in accordance with the Pharmacy Act, 1868, is in that sense unqualified, whatever his qualifications otherwise may be, and no reproach to the latter is implied.—EDITOR *C. & D.*

Dispensing Notes.

Most dispensing problems are dealt with in "The Art of Dispensing," but we are always pleased to get fresh ones for solution, and to receive the opinions of readers on the points discussed.

A Tar Mixture.

SIR,—The following prescription was brought to us to be dispensed:

Syr. picis liq., U.S.P.	...	...	3iv.
Tinct. pruni virg., B.P.C.	...	...	3j.
Potass. iodid.	...	...	gr. xvj.
Aquam ad	...	...	3viij.

We enclose you two samples, A and B, one being dispensed here and the other elsewhere. Will you please tell us which you consider correct, and, if possible, how the mistake occurred?

Yours faithfully,

Tesco. (61/2.)

[Solution A is correct. Solution B has been made with liquor picis carbonis instead of syrup. picis liq.—due probably to a misreading of this item of the prescription. The opacity of solution B is characteristic of dilutions of liquor picis carbonis with aqueous fluids.]

Legal Queries.

Consult the legal information in "The Chemists' and Druggists' Diary," 1910 before writing about your difficulty.

Borax (69/48).—A wine and spirit licence does not cover the sale of beer, so that it would be illegal for you to put up and sell a mixture of black beer and rum.

E. B. K. (69/55).—Pharmaceutical chemists, if actually practising as such in England and Wales, are, by the *Juries Acts*, 1862 and 1870, exempted from serving upon any juries or inquests whatsoever.

Rustic (69/71).—There is no such thing in this country as a county law which prevents a chemist from starting in business within a certain distance of one which he has disposed of; that point is usually covered by mutual agreement when sales are made.

R. H. (70/54).—The paper upon which the return for income-tax is made sets forth all the deductions that may be made before arriving at business profits. If a person is in receipt of a net income exceeding 160l. per annum, certain abatements are allowed, as to which see the *C. & D. Diary*, 1910, p. 548.

F. W. D. (62/70).—The Royal College of Veterinary Surgeons does not accept American or other foreign diplomas for registration as veterinary surgeons, but there is power in respect to Colonial diplomas. An American (U.S.A.) vet. may practise in Ireland or in Great Britain, but he must not use his veterinary titles, as that infringes Section 17 of the Act. What do you mean by qualifying as a vet. in U.S.A.?

Subscriber (70/70).—See reply to "A Reader." If a trader, not being a registered chemist and druggist, has a paper signed by his apprentice-master to the effect that he has served a three-years' apprenticeship to a chemist and druggist, the paper should be submitted to the chief local Customs and Excise officer, or sent direct to the Board of Customs and Excise for approval, before "known, admitted, and approved remedies" are sold unstamped.

Debts (25/55).—As the debts were not transferred to the company at the time they purchased the business, they must now be properly transferred, and express notice of such transfer given to the debtors before the company can take proceedings for the recovery thereof against the debtors. The

transfer of the debts must be properly stamped, and if there is a consideration for the transfer *ad valorem* duty will be payable on such consideration. If, however, no consideration is mentioned, the transfer must be under seal and 10s. stamp-duty placed on the document. It would perhaps be advisable for you to place the matter in the hands of a local solicitor if the debts are sufficiently large.

Mon (68/44).—Indentures of apprenticeship are not absolutely necessary when entering for the Minor examination. A declaration by a pharmaceutical chemist, chemist and druggist, or medical practitioner to the effect that the applicant has been engaged for three years in dispensing physicians' prescriptions suffices for the purpose. Therefore, as you are a registered chemist, you may testify to the declaration when your pupil requires it. As explained in the editorial article "Regular Apprenticeship," the decision reported was under the Medicine Stamp Act, 1812, without reference to Pharmacy Act requirements. Indentures of apprenticeship should be embossed with a 2s. 6d. stamp.

A Reader (67/3) writes: "Is an unqualified man, after serving four years' apprenticeship and now holding written proof of same, exempt from patent-medicine stamp-duty on articles sold, providing the number of the published formula is on label, or contents disclosed?" [An unqualified man who desires to get the exemption as to "known, admitted, and approved remedies" must be prepared to produce an agreement of apprenticeship. The Board of Customs and Excise may formerly have accepted a written declaration that the person had served an apprenticeship, but they are now bound by the decision in *Kirkby v. Taylor*, the judgment in which followed the argument that an "instrument of apprenticeship"—i.e., indentures—is essential.]

A. (69/67).—If a person carrying on the business of a retail chemist and druggist, and keeping open shop for compounding and dispensing poisons, uses the title "Wholesale Chemist," he acts illegally. There have been numerous decisions to this effect. The business of a wholesale druggist is exempted to a certain extent—that is to say, the Pharmacy Act is not to interfere with wholesale dealers in supplying poisons in the ordinary course of wholesale dealing, but the Act does not exempt them specifically from the penalties incurred by the use of the title "Chemist and Druggist," or "Chemist," or "Druggist." It has not been the custom of the Pharmaceutical Society to interfere when the business is actually a wholesale one, with nothing retail about it. Section 17 of the Act exempts wholesalers from certain provisions as to labelling when poisons are sold to "retail dealers"—i.e., registered chemists, medical practitioners, or others who may lawfully keep open shop for the sale of poisons by retail.

Cinemat (62/71).—Cinematograph exhibitions in private dwelling-houses to which the public are not admitted are excluded from the provisions of the Cinematograph Act. You, as an individual cinematographist, must apply to your County Council for a licence, giving the chief officer of the police seven days' notice of your application. The licence, if granted, will specify the premises where you may give exhibitions. You, of course, mention these in your application. If the premises are only used occasionally for cinematographic exhibitions (not more than six times in one year) they do not require to be licensed, but the occupier must notify the chief officer of the police seven days before the proposed exhibition, and conform to the Home Office regulations. The fee for a licence is 20s. the first year, and 5s. a year on renewal. It may be transferred. The licensee must conform to the regulations referred to. These are too long to quote here, but we may say that they refer to (1) the buildings in which the exhibitions are given; (2) enclosures for the apparatus; (3) electric light to the lamps; and (4) lime-light for lamps, with an appendix on gas cylinders.

Rogamus (66/3) took business premises in a new building for one year certain at the yearly rental of 45*l.*, with the option of lease, and on the expiration of the first term decided to take the premises for seven years, subject to the rent being reduced by 5*l.*, which was agreed to by landlord. Previous to the lease being signed he struck out all words which would make him responsible for repairs. During the term that 45*l.* was paid he was assessed for rates on that amount; when the rent was reduced to 40*l.* he appealed, and assessment was reduced to 42*l.* On making a further appeal for rates to be reduced according to the rent, the Assessment Committee informed him that, according to the wording of the lease, he was responsible for certain repairs, which justified them in assessing the premises as if the rental were 42*l.* The clauses referred to are as follows:

To keep the said premises (including but not so as to limit the generality of the preceding words the landlord's fixtures and fittings and also the glass in all windows and doors and also all locks

fastenings bells and other internal fixtures) in good and tenable order repair and condition reasonable wear and tear excepted also to use the water closets and drains in a proper and tenantlike manner, and to quietly yield up the same together with the said fixtures and fittings in such good and tenable order, repair and condition on the expiration or other sooner determination of the tenancy.

That it shall be lawful for the landlord or his agent or workmen and for his superior landlord (if any) or his agent or workmen to enter upon the said premises at all reasonable times during the tenancy for the purpose of inspecting the condition thereof and to do any necessary repairs which he may decide upon.

[It is quite clear from the extracts from the lease that "Rogamus" is liable to keep the premises in good and tenable repair. In our opinion, the authorities are not justified in assessing the premises at more than the rental paid by him if such rental is the full rack rental. If "Rogamus" thinks it is worth his while, his course is to appeal against the assessment to Quarter Sessions.]

Miscellaneous Inquiries.

As we do not in this section repeat information given during the past twelve months, inquirers should refer to the copies mentioned. Back numbers for the past five years can generally be obtained from our office at the published prices.

P. J. S. (63/34).—It is surely perfectly obvious that if part of a duty-paid article is lost in the process of manufacture there is a loss of duty. To that extent your criticism of Mr. Cadbury's observations is absurd, and not worth giving space to. The letter was communicated to the *C. & D.*, not "quoted."

A. M. (59/66).—Mr. Bradley, in the "Oxford English Dictionary," gives:

"Gliadin. *chem.* [a. F. *gliadine*, from Gk. *γλια*, glue]. The viscid portion of gluten. Called also *glutin*."

From the above you will get the information you ask for. We get the word direct from the French. *Glia* itself also occurs as an English name in composition with *cell*. See Quain's "Anatomy" (ed. 10), I. ii. 323: "The neuroglia is, in fact, composed of greatly ramified cells (*glia-cells*)."

Subscriber (63/33) wants a successful treatment of THREAD OR NEEDLE WORMS. He has tried enemas of salt, quassia, and lime for months without effect. In one case they issue through the nose and ears of the patient (thirty-five years old). [Enemas of salt and water and quassia are the approved treatment for threadworms. It is worth trying the enemas from time to time. The patient should be put on a course of iron—say, 10 minims tr. ferri perchlor. three times a day—and should not be allowed to eat salads or any raw vegetables. A weekly dose of calomel and santonin of each 4 grains, taken at night fasting, and a dose of black draught in the morning are good. We should think it impossible for threadworms to issue from the nose and ears, and should require ocular demonstration before believing such a statement.]

Aspirin (68/38).—CHEMISTS AND MEDICAL QUALIFICATION.—Generally speaking, chemists in business in towns where there are medical schools may succeed in qualifying as medical practitioners without much expense, but one in a position such as yours, remote from medical schools, would of necessity have to give up the business, unless he could arrange for it being carried on by a qualified manager, the chemist attending during vacations and week-ends, and so on. If you have a strong liking for medical practice, you may succeed better in it than in pharmacy, but that is a question which you alone can determine. We judge that you will be about thirty-five years of age before you can be registered, and then you will have to face the problem of establishing a practice without capital. There is no legal hindrance to a medical practitioner carrying on business as a chemist and druggist, for the General Medical Council does not regard this as "infamous conduct in a professional respect," so long as the business is conducted according to law. The following are replies to your specific questions: (1) If a local schoolmaster is acquainted with the requirements of the Preliminary examination you desire to pass, you should place yourself in his care. (2) During study at the medical school practically all the time, including evenings, is occupied after the First Professional examination is passed. We have known of several cases where chemists' assistants have held part-time situations as such during the first two years of the medical curriculum. (3) If a chemist-medical student can get dental work in the evenings, there is no legal obstacle to his doing it. You should read the information regarding the medical profession in our last Educational Number, published August 15, 1909. The chemist's "bondage" is less irksome than that of the family doctor. The latter must be prepared to attend his patients

at any moment of the day or night, while the chemist can, if he is sufficiently strong-minded, close his shop at any hour of the evening he likes, and keep it closed until the next morning. We consider that there is as much to be made in pharmacy as in medicine, but there is little doubt that in the latter the work is infinitely more interesting, especially for those who are fond of it, while the possibilities of service to humanity are unlimited.

F. M. (42/45).—ARSENICAL SOAP FOR TAXIDERMISTS.—As originally devised by Bécœur, of Metz, the formula for arsenical soap is:

Powdered arsenic ...	...	...	2 lb.
Camphor ...	...	...	5 oz.
White soap ...	...	...	2 lb.
Potassium carbonate ...	...	...	12 oz.
Quicklime ...	...	...	4 oz.

Melt the soap with a small quantity of water, add the lime and pot. carb., remove from the fire, add the arsenic and camphor, and stir till smooth, using a little more heat if necessary. The product should be of the consistency of ordinary flour-paste. For use mix with an equal quantity of water and apply to the feathers or skin with a bristle brush. Arsenic as a preservative is not looked upon with favour by modern taxidermists, the preference being for an alcoholic or ethereal solution of mercuric chlorido (10 to 50 grains per pint).

Cough (45/24).—Benzine is the best solvent for naphthalene deposited in gas-pipes.

H. H. H. (44/26).—(1) Tin oxide and oleate are recognised bases of NAIL-POLISHES. You do not mention with what powders you have experimented. The following is from "Pharmaceutical Formulas":

Putty powder ...	...	...	3viij.
Carmine ...	...	...	3j.
Otto of rose ...	...	...	mvj.
Oil of neroli ...	...	...	mv.

Triturate well together.

(2) **LIQUID DENTIFRICE AND MOUTH-WASH.**—The favourite recipe for this is that containing quillaia and carbolic acid, such as the following:

Carbolic acid ...	...	...	1½ dr.
Aromatic acetic acid ...	...	...	3 dr.
Oil of lavender ...	...	...	50 m
Oil of cinnamon ...	...	...	15 m
Powdered cochineal ...	...	...	½ dr.
Powdered quillaia ...	...	...	4 oz.
Rectified spirit ...	...	...	12½ oz.
Water ...	...	...	12½ oz.

Macerate for a week, filter, and make up to 25 oz. with equal parts of rectified spirit and water.

As a dentifrice, a few drops are sprinkled on the wet tooth-brush, while for a mouth-wash a teaspoonful is added to a wineglassful of warm water.

H. T. (53/11).—SCHWEISSINGER'S OINTMENT.—This we suppose to refer to a yellow oxide of mercury ointment made by the use of moist mercuric oxide as first suggested by Schweissinger. Dr. W. H. Martindale's method of doing this was given in the *C. & D.*, November 10, 1906, p. 719. It is also given in "Pharmaceutical Formulas."

C. M. W. G. (66/23).—OLIVE-OIL TEST.—Renard's test is for the detection of earth-nut oil; it was afterwards modified by Archbutt. Hydrocarbons may be detected by completely saponifying the oil with alcoholic sodium or potassium hydroxide, evaporating off most of the spirit and adding water, shaking up with ether, separating the ethereal liquid, and evaporating off the solvent. Hydrocarbon oils, being unsaponifiable, are left behind after the ether is dissipated.

T. A. (62/57).—Quain's "Dictionary of Treatment" gives the best epitome with which we are acquainted of the disease you mention.

Specs (44/20).—BOOK ON DISINFECTANTS AND ANTISEPTICS.—We know of no book at the price you mention. Rideal's "Disinfection and the Preservation of Food" (15s.). Sanitary Publishing Co.) is the standard work on this subject.

H. R. (66/10) asks what should be used for "subcarbonate of iron" in the subjoined prescription, which is supposed to be a sample of newspaper prescribing:

Subcarbonate of iron ...	...	...	1½ dr.
Extract of gentian ...	...	...	30 grains
Powdered ipecacuanha ...	...	...	15 grains
Powdered Socotrine aloes ...	...	...	8 grains

Make into thirty pills.

[It is probable that pilula ferri B.P. is intended to be used, but it should be noted that the proportion of ferrous carbonate in pil. ferri is only one in five. Three grains of ferrous

carbonate is not an excessive dose, but to put the equivalent of this in the form of the B.P. mass would make a bolus rather than a pill.]

E. A. J. (64/6).—(1) An article on modified cold-creams was given in the *C. & D.*, April 3, 1909, p. 534, to which you should refer. The tendency to rancidity is avoided by using a mineral oil in place of almond oil. (2) **CORN-CURE.**—Ext. cannab. indica is not an essential ingredient in salicylic-acid corn-solvent. It is used more as a colouring-matter, as the quantity generally employed can have but little pain-preventing action.

Bromley (64/24).—COPYING-GRAPH.—The proportions of gelatin, glycerin, and water vary, but the following yield a good product:

Gelatin or thin glue ...	...	...	1 part
Glycerin ...	...	...	2 parts
Water ...	...	...	1 part

Soak the gelatin in the water over-night, melt on a water-bath, and add the glycerin. The mass is better for being mixed with some chalk, as the transferred writing is easier to see, and the ink has less tendency to sink into the graph. The proportion of chalk required is about a quarter that of the gelatin.

J. T. W. (64/27).—We do not know of a method of increasing the hardness of loofahs, but you might try the effect of formalin, which has among its commercial applications the hardening of the cotton-fibre, so as to give the rustle of silk to mercerised fabric.

A. C. (61/60).—EXAMINATION OF TURPENTINE.—It does not follow that the turpentine to which you refer was adulterated with a mineral oil or spirit, as pine and rosin oils and pinolene are more "scientific" adulterants. In judging of the quality of samples of turpentine, the following determinations are required: The sp. gr. at 15° C. varies from 0.86 to 0.871; a lower value may be due to the presence of petroleum or shale oil, a higher to resin spirit, Russian turpentine, or old oxidised turpentine. The refractive index (1.4690 to 1.4720) varies in a similar way. No direct information as to quality is obtained from the optical rotation. A good American box turpentine should comply with the following requirements when fractionally distilled: 100 c.c. distilled in a three-bulb Ladenburg flask of 180 c.c. capacity to neck should yield no distillate before the temperature reaches 155° C., not less than 70 c.c. between that temperature and 160° C., and a total distillate of not less than 95 c.c. up to a temperature of 180° C. Heavy petroleum-spirit is determined by Armstrong's method of polymerising the terpenes with sulphuric acid and then distilling in steam, the distillate containing only the volatile paraffins. Valenta proposed to detect and distinguish pine oils and pinolene as adulterants of turpentine by treating the distillate below 160° C. with acetic anhydride and a drop of sulphuric acid, when an intense green colour is given if pinolene is present, or by mixing 1 part with 1 to 2 parts of 6-per cent. solution of iodine in carbon bisulphide or carbon tetrachloride and heating on a water-bath. An intense green to olive-green colour is obtained by pinolene, none by pine oils, petroleum distillates, camphor or rosin oils. Some analysts trust to the iodine-absorption test (average for pure spirit of turpentine, 384), the following being the percentage absorptions of the common adulterants: Rosin spirit, 185; rosin oil, 97; kerosene, 0; naphtha, 0; refined wood turpentine, 212; water-white wood turpentine, 328. The glacial acetic-acid miscibility test in the B.P. does not detect petroleum.

Our Retrospect.

(From the "*C. & D.*," February 15, 1860.)

Ammonia from Coking Ovens.

Practical chemistry is busy in the "Black Country." An attempt is being made to collect the ammonia from the coking ovens at the ironworks. From experiments made by Mr. Wildsmith, of Wolverhampton, the product submitted to him was found to contain a quantity of ammonia in the same state as that found in water obtained in the manufacture of gas, and if the apparatus for collecting it were as complete as it might be made, enough would be collected to make the effort profitable commercially. From 250 gallons of ammoniacal liquor seven pounds of pure chloride of ammonium were obtained; and the coking ovens of one works will yield daily 10,000 gallons of the above-named liquor. In the same district efforts are also being made to extract from the "shale" of the coal-pits, now lying worthless in vast mounds on every hand in South Staffordshire, paraphine, petroleum, naphthalene, and naphtha; and we are glad to add that the experiments, so far as they have gone, promise fairly to prove successful. Should they do so, chemistry will add in this way very greatly to the national wealth.

The Essential Oils of the Pharmacopœia.*

By C. A. Hill, B.Sc., F.I.C., and John C. Umney, F.C.S.

HAVING the opportunity of producing essential oils in our manufacturing laboratories, and of examining in our analytical laboratories the products of others as derived from America, France, Germany, Sicily, and elsewhere, our fellow-members of the Committee of Reference in Pharmacy of the British Pharmacopœia have asked us to record our individual views for the observation of others, and, after consideration of such criticism and acceptance of suggestions, to embody them in a recommendation to the General Medical Council for incorporation in a new Pharmacopœia. It is hoped and believed that by this method of dealing with the leading subdivisions of the pharmacopœial work the authorities may gain the advantage of the opinions of all competent to advise by specialisation in manufacture or pharmaceutical study. Nearly twelve years have now passed since the publication of the last Pharmacopœia, and probably in no section of that work has greater progress been made than in the one for which we now claim your consideration.

The principles which should guide the formation of official monographs for such things as essential oils are complex considerations. To take a genuine normal product and to describe it in general terms and to define its chemical and physical characteristics is one thing, and to adjust the limits of those chemical and physical characters so as to include on the one hand all products which may rightly be described as normal, and on the other hand to exclude not only abnormal and inferior natural products, but the wilful productions of clever and ingenious adulterators, is by no means an equally simple task.

The compilers of the British Pharmacopœia have the power to say that a certain oil used in pharmacy shall be distilled from plants grown exclusively in Great Britain, or, on the other hand, they may allow much greater latitude to the manufacturers or distillers. They may define the time of year at which that portion of the plant from which the oil is distilled shall be collected. Further than this, they may claim limits for certain of the physical characters which shall make it necessary for the distiller in many cases to rectify his natural product and to choose only that portion which shall contain a certain percentage of the chief constituent of the natural oil. Such a case, for instance, we meet in *oleum anethi*. To put the case briefly, the principles of standardisation must apply, though in a limited degree, to such things as essential oils.

Although our knowledge of essential oils has progressed sufficiently far to enable us to assay many of them for what are admittedly their most important constituents, we are not yet in a position to replace the natural oils by those constituents, whether natural or artificial products. Just as in the Pharmacopœia we now have *nux vomica* and *strychnine*, *cinchona* and *quinine*, *opium* and *morphine*, so we have *peppermint oil* and *menthol*; and we think it well to retain such oils as *dill* and *caraway*, and not to replace them by, or even to include, *carvone*. We think it well to retain oils of *cloves* and *pimento*, and not to include *eugenol*, believing, as we do, that the other bodies which are present in these oils, and which have a modifying influence on their odour and taste, make the oils themselves more readily acceptable than these, their chief constituents, for which they are assayed.

The monographs of the present British Pharmacopœia were based on a paper by one of us, published in 1895 ("Pharm. Journal," xxv.), and it is with regret that we now record the opinion that the more scientific adulteration practised to-day necessitates the framing of more detailed and more stringent characters and tests than were put forward in 1898. This elaboration, however, has only been thought desirable to such a point as will embrace pure oils of high medicinal or odour value, without including such details as really belong to a scientific work solely devoted to the subject.

Although it is in our view of the highest importance

that the official monographs should be drawn sufficiently strictly to ensure that only pure and unadulterated oils will be used in pharmacy, we feel it incumbent upon us specifically to state that the pharmacopœial monographs are not intended as a complete guide to enable the analyst to detect adulteration. Moreover, it has constantly to be borne in mind that the more one legislates against possible adulterations, the more does one "hall-mark," so to speak, as B.P. all those products which will pass the tests so framed. That this is a very real danger has been brought home to us in many cases during recent years. It is hardly necessary to name the fact that the present Pharmacopœia tests for lavender oil, to take an example, do not exclude adulterated oils; in fact, it would be quite easy to produce a mixture innocent of oil of lavender which should pass the characters and tests of the present official monograph. In deciding, therefore, whether or not a given sample should be accepted or rejected as B.P., one should have regard to the description given, which states that the oil must be distilled from *Lavandula vera*. If the analyst has reasonable ground for deciding that the product in his hands has not been so distilled he is justified in rejecting it on that ground alone.

In the British Pharmacopœia of 1898 the proportion of the actual medicinal or odorous constituents is regulated in most cases by the physical characters, and in a few cases by special tests—viz., a due proportion of cineol in *cajuput* and *eucalyptus* oils as shown by becoming solid when stirred with one-third to half its volume of phosphoric acid; a due proportion of *eugenol* in *clove* and *pimento* oils by the formation of a semi-solid mass with solution of ammonia; and at least 50 per cent. of *cinnamic aldehyde* in oil of *cinnamon* as determined by the sodium-bisulphite method. We propose to extend this to the following quantitative determinations:

Cineol in *cajuput* and *eucalyptus* oils.
Phenols in *clove*, *pimento*, and *thyme* oils.
Esters in *lavender* and *pine* oils.
Alcohols in *peppermint*, *rosemary*, and *santal* oils.
Citral in *lemon* oil.
Allyl thiocyanate in oil of *mustard*.
Cinnamic aldehyde in oil of *cinnamon* by the neutral-sulphite method in place of the acid sulphite.

In other cases, such as *dill* and *caraway*, the official characters are in themselves sufficient to ensure high proportions of active constituents within fairly narrow limits.

It is an open secret that the Pharmacopœia Committee of the General Medical Council has already fully considered many important omissions, but without deciding on the expurgation of any essential oil now official. Those awaiting the verdict of official recognition are oils of *orange*, *sweet birch*, *fennel*, and *thyme*. Of these we have drafted suggested monographs, and the inclusion or otherwise of them depends upon the decision to be come to by the Pharmacopœia Committee of the General Medical Council. It will be noticed that we recommend the omission of the oil of *Pinus Pumilio* and the substitution for it of the oil of *Pinus sibirica*, which is readily obtainable pure, and is probably of equal medicinal value and preferable odour.

In this communication we have endeavoured to hold two most important considerations in mind—(a) to obtain the maximum of therapeutic value with (b) the acceptance of normal and natural distillates.

We desire to record our indebtedness to Mr. C. T. Bennett and Mr. T. T. Cocking, who have conducted much of the analytical work on which these proposed monographs are based.

It is suggested that the general processes for the estimation of alcohols and esters shall be included in the appendix as well probably as other

General Processes of Assay.

The following are specifically mentioned in the monographs:

SAPONIFICATION PROCESS.—Two to five grams of the oil (according to the proportion of esters present) is heated for

* Abstract of a paper communicated to the Pharmaceutical Society at Bloomsbury Square, W.C., on February 8.

an hour with 25 c.c. of normal alcoholic potash and 25 c.c. of pure alcohol. The excess of potash is then titrated with normal sulphuric acid, and the number of c.c. required deducted from the number of c.c. required by a blank experiment conducted under the same conditions without the oil. The number of c.c. of normal potash absorbed multiplied by the ester equivalent and by 100, and divided by the quantity of oil taken, gives the percentage of esters in the oil. *Note*.—If the oil contains free acid (which must be first ascertained by experiment), the amount of alcoholic potash required to neutralise must be deducted before the ester percentage is calculated.

ACETYLATION PROCESS.—Ten c.c. of the oil is heated for 1½ hour with 10 c.c. of acetic anhydride and 1 gram of anhydrous sodium acetate; 100 c.c. of water is added, and the aqueous layer removed by means of a separator, and the oil washed until free from acidity with successive portions of 100 c.c. of water, thoroughly shaking and allowing to separate. The acetylated oil is then dried by the addition of anhydrous sodium sulphate, and filtered; 2 to 5 grams of the acetylated oil is then saponified with alcoholic potash, as described under the saponification process, and the percentage of alcohol calculated from the formula $\frac{x \times Y \times 100}{W - 0.042x}$; where x is the

number of c.c. of normal alcoholic potash absorbed, Y is the number of grams of alcohol equivalent to 1 c.c. of normal potash, and W is the weight of the acetylated oil taken.

Monographs.

[In the following paragraphs the abbreviations are: S.G.=specific gravity; O.R.=optical rotation (100-mm. tube); R.I.=refractive index; Sol.=solubility; and Vol.=volume or volumes. Specific gravities are recorded at 15.5° C. unless otherwise stated. Optical rotations are recorded at 20° C. unless otherwise stated. Refractive indices are recorded at 25° C. unless otherwise stated. The paragraphs are abstracts of the authors' statements. We add in brackets the present British Pharmacopoeia corresponding factors. Refractive indices are new. General characters are repeated when they differ materially from those at present given.—EDITOR C. & D.]

OLEUM ANETHI.—Distilled from fruit of *Peucedanum graveolens*. Pale yellow, darkening on keeping, odour resembling caraway oil. S.G., 0.900 to 0.910 [0.905 to 0.920]; O.R., +70° to +75° [+70°]; R.I., 1.483 to 1.485; Sol., 1 vol. in 3 of 90-per-cent. alcohol. *Note*.—By specifying *Peucedanum graveolens*, the oil of Indian fruit (*P. Sowa*) is excluded. Some normal distillates of dill-fruit have a lower S.G. than 0.905, but, since the oil is for medicinal purposes and the carminative principle is carvone, a high proportion of the latter should be ensured by the minimum S.G. limit suggested. A high S.G. should put the analyst or user on his guard for admixture with caraway oil.

OLEUM ANISI.—Oil distilled from fruit of *Pimpinella Anisum* or of *Illicium verum*, the latter being that used almost entirely in this country. S.G. at 20° C., 0.975 to 0.990 [same], rising on keeping; O.R., -0° to -2°; R.I., 1.552 to 1.558. Congeals when stirred at about 10° C. [10° to 15° C.], and should not melt again below 15° C. [same]. At least 80 per cent. should distil between 225° and 235° C. Sol., 1 vol. in 3 of 90-per-cent. alcohol.

OLEUM ANTHEMIDIS.—Oil distilled from the flowers of the Roman chamomile. S.G., 0.905 to 0.915 [same]; O.R., +1° to +3°; R.I., about 1.445; Sol. in less than its own vol. of 90-per-cent. alcohol.

OLEUM CAJUPUTI.—Oil distilled from the leaves of *Melaleuca Leucadendron* and other species. S.G., 0.919 to 0.930 [0.922 to 0.930]; O.R., not more than -2°; R.I., 1.460 to 1.457. Ten c.c. mixed in a freezing-mixture, with 4 to 5 c.c. of phosphoric acid (S.G. 1.750), and pressed in a piece of fine calico between folds of blotting-paper under a strong press, and the pressed cake decomposed by water in a 25-c.c. measure, should yield at least 4.5 c.c. of cineol.

OLEUM CARUL.—Oil distilled from caraway-fruit and rectified. S.G., 0.910 to 0.920 [same]; O.R., +75° to +82°; R.I., 1.437 to 1.497. Sol. in equal vol. of 90-per-cent. alcohol and in 10 vol. of 60-per-cent. alcohol. When fractionally distilled from a Wurtz flask at the rate of 1 drop per second, at least 50 per cent. should distil above 200° C.

OLEUM CARYOPHYLLI.—S.G., 1.047 to 1.070 [1.050]; R.I., 1.523 to 1.540; Sol., 1 vol. in 3 of 70-per-cent. alcohol. An alcoholic solution yields a blue colour with test-solution of ferric chloride. If 10 c.c. of the oil be heated on a water-bath in a flask with neck graduated in tenths of 1 c.c., and well shaken with 100 c.c. of a 5-per-cent. aqueous solution of potassium hydroxide and allowed to stand, the uncombined oil driven into the neck should measure not more than 2 c.c., showing the presence of at least 80 per cent. of eugenol.

OLEUM CINNAMOMI.—S.G., 1.025 to 1.040 [1.025 to 1.035]; O.R., from -0.5° to -1°; R.I., 1.572 to 1.582; Sol., 1 vol. in 3 to 4 of 70-per-cent. alcohol. One drop dissolved in 5 c.c. of 90-per-cent. alcohol and 1 drop of test-solution of ferric chloride added should afford a pale-green but not a blue or brown coloration (absence of cinnamon-leaf and cassia oils). It should contain 55 to 75 per cent. of cinnamic aldehyde as determined by the following test: Ten c.c. of the oil is added to 70 c.c. of 20-per-cent. solution of sodium sulphite, and a few drops of phenolphthalein test-solution added to give a well-marked pink coloration. The mixture is heated in a water-bath, well shaken, and neutralised from time to time by the addition of a 10-per-cent. solution of acetic acid, until the liquid develops no further pink coloration, the process occupying from thirty to forty-five minutes. The oily layer, which separates on standing, on cooling to 15° C., should measure not more than 4.5 c.c. nor less than 2.5 c.c., showing the presence of 55 to 75 per cent. of cinnamic aldehyde.

OLEUM COPAIBE.—S.G., 0.900 to 0.910 [same]; O.R., -7° to -35° [laboratory without factors]; R.I., 1.494 to 1.500; distils between 250° and 275° C. One c.c. of the oil dissolved in 5 c.c. of glacial acetic acid, and 4 drops of nitric acid added, should not develop more than a faint violet coloration (absence of gurjun oil). *Note*.—We suggest that a complete inquiry be instituted from a medical standpoint into the relative values of the oil and the resin of copaiba, with a view to the possible omission of the present monograph and to the framing of a satisfactory one for copaiba itself.

OLEUM CORIANDRI.—S.G., 0.870 to 0.885 [same]; O.R., +8° to +14°; R.I., about 1.463 to 1.467; Sol., 1 vol. in 3 of 70-per-cent. alcohol.

OLEUM CUBEBE.—S.G., 0.910 to 0.930 [same]; O.R., -25° to -40°; R.I., 1.486 to 1.494. At least 80 per cent. of the oil should distil between 250° and 280°.

OLEUM EUCALYPTI.—Oil distilled from the fresh leaves of *Eucalyptus Globulus*, *E. dumosa*, and other species, and rectified. S.G., 0.910 to 0.930 [same]; O.R., +10° to -10° [same]; Sol., 1 vol. in 5 of 70-per-cent. alcohol. It should contain at least 55 per cent. by vol. of cineol when tested according to the process described under "*Oleum Cajuputi*." If 1 c.c. be mixed with 2 c.c. of glacial acetic acid and 5 c.c. of petroleum ether, and 2 c.c. of a saturated aqueous solution of sodium nitrite added, and the mixture gently shaken, no crystalline precipitate should form in the upper layer (exclusion of oils containing much phellandrene).

OLEUM JUNIPERI.—Oil distilled from the ripe fruit of *Juniperus communis* and rectified. S.G., 0.862 to 0.890, increasing with age [0.865 to 0.890]; O.R., -3° to -12°; R.I., 1.472 to 1.488; Sol. (when freshly distilled) 1 vol. in 4 of 95-per-cent. alcohol, becoming less soluble with age.

OLEUM LAVANDULÆ.—Oil distilled from the flowers of *Lavandula vera*, cultivated in England, France, and other countries. S.G., 0.883 to 0.900 [0.885]; O.R., -3° to -10°; Sol., 1 vol. in 3 of 70-per-cent. alcohol. The English oil should contain from 7 to 11 per cent. of esters, and the foreign oil not less than 30 per cent. of esters, calculated as linalyl acetate, as determined by saponification with alcoholic potash.

OLEUM LIMONIS.—The oil obtained by expression by various methods from fresh lemon-peel. S.G., 0.857 to 0.860 [same]; O.R., +58° to +64°; R.I., 1.474 to 1.476. Should contain at least 3.5 per cent. of citral. *Note*.—The merits of the various processes for the determination of citral in lemon oil are at present under investigation.

OLEUM MENTHÆ PIPERITÆ.—Oil distilled from fresh flowering peppermint (*Mentha Piperita*), rectified, if necessary, by redistillation. S.G., 0.900 to 0.920 [same]; O.R., -20° to -35°; Sol., 1 vol. in 4 of 70-per-cent. alcohol. Should contain at least 50 per cent. of menthol, free and combined, determined by the acetylation process, and not less than 6 per cent. of esters (calculated as menthyl acetate) by saponification with alcoholic potash.

OLEUM MENTHÆ VIRIDIS.—Oil distilled from fresh flowering spearmint, *Mentha viridis* or *Mentha crispata*. S.G., 0.925 to 0.940 [0.920 to 0.940]; O.R., -30° to -50°. Forms a clear solution with an equal vol. of 80-per-cent. alcohol, the solution becoming turbid on further dilution. Sol., 1 vol. in 3 of 90-per-cent. alcohol.

OLEUM MYSTICÆ.—Oil distilled from nutmegs and subsequently rectified. S.G., 0.870 to 0.920 [0.870 to 0.910]; O.R., +13° to +30°; R.I., 1.474 to 1.484; Sol., 1 vol. in 3 of 90-per-cent. alcohol. When evaporated on a water-bath it should not leave a residue that crystallises on cooling.

OLEUM PIMENTÆ.—S.G., 1.040 to 1.055 [1.040]; O.R., 0° to -4°; R.I., 1.508 to 1.535; Sol., 1 vol. in 3 of 70-per-cent. alcohol. It should contain not less than 65 per cent. by vol. of eugenol when tested as described under "*Oleum Caryophylli*."

OLEUM PINI.—The oil distilled from the fresh leaves of *Pinus sibirica*. S.G., 0.900 to 0.920; O.R., -32° to -42°; R.I., about 1.474. It should contain 30 to 40 per cent. of esters (calculated as bornyl acetate), as determined by saponifica-

tion with alcoholic potash. *Note*.—We suggest the substitution of this oil for that of *Pinus Pumilio*.

OLEUM ROSÆ.—S.G. at 30° C. (compared with water at 15° C.), 0.855 to 0.862 [0.856 to 0.862]; O.R., -2° to -4°; R.I. at 25°, 1.456 to 1.465; M.P., 20° to 22.5° C. [19.4° to 22.2° C.].

OLEUM ROSMARINI.—S.G., 0.900 to 0.920 [0.900 to 0.915]; O.R., 0° to +15° [up to +10°]; R.I., 1.463 to 1.470; Sol. 1 vol. in 1 of 90-per-cent. alcohol and 1 vol. in 5 to 10 of 80-per-cent. alcohol. It should contain not less than 10 per cent. of alcohols, calculated as borneol and determined by the acetylation process, and at least 2 per cent. of esters, calculated as bornyl acetate and determined by the saponification process.

OLEUM SANTALI.—Oil of sandal or santal wood. S.G., 0.973 to 0.985 [0.975 to 0.980]; O.R., -16° to -20° [same]; R.I., 1.498 to 1.508; Sol. 1 vol. in 6 of 70 per-cent. alcohol at 20° C. Should contain not less than 90 per cent. of alcohols, calculated as santalol, $C_{15}H_{24}O$, when determined by the acetylation process.

OLEUM SINAPIS VOLATILE.—Obtained by distillation from black-mustard seeds after being deprived of fixed oil and macerated in water for several hours. S.G., 1.018 to 1.023 [1.018 to 1.030]. Distils between 148° and 156° C. [147.2° to 152.2°]. Should contain not less than 92 per cent. of allyl isothiocyanate, determined by the following process: Weigh accurately about 1 gram of the oil, and add sufficient alcohol to make 50 c.c. contain exactly 1 gram of the oil. Of this solution transfer 5 c.c. to a 100-c.c. flask, and add 30 c.c. of decinormal silver-nitrate solution and 5 c.c. of solution of ammonia. Heat on a water-bath at 80° C. for thirty minutes (shaking frequently), cool the contents to 15°, make up to exactly 100 c.c. with distilled water, and filter. To 50 c.c. of the filtrate add 4 c.c. of nitric acid and a few drops of ferric ammonium-sulphate solution, then add from a burette sufficient decinormal potassium-thiocyanate solution to produce a permanent red colour—not more than 5.6 c.c. should be required. *Note*.—One c.c. of decinormal silver-nitrate solution corresponds to 0.00496 gram of allyl isothiocyanate, calculated on the international atomic weights.

OLEUM TEREBINTHINÆ RECTIFICATUM.—Oil distilled from the oleo-resin (turpentine) obtained from *Pinus sylvestris* and other species of *Pinus*, rectified by redistillation. S.G., 0.860 to 0.870 [none]; R.I., 1.465 to 1.480. Almost entirely distils between 160° and 180° C., leaving no appreciable residue.

Proposed New Monographs.

The following oils are under the consideration of the General Medical Council:—

OLEUM AURANTII.—Oil of orange. The oil obtained by expression from the rind of the bitter orange (*Citrus Aurantium* var. *Bigaradia*) and the sweet orange (*Citrus Aurantium*). *Characters and Tests*.—An orange-yellow liquid having the characteristic odour of oranges and an aromatic bitter taste. S.G., 0.847 to 0.855; O.R., +92° to +98° (sweet, +95° to +98°); R.I., 1.472 to 1.478. Rapidly deteriorates on exposure to air and light.

OLEUM GAULTHERIÆ.—Oil of gaultheria (synonym, oil of wintergreen). The oil obtained by distillation from *Gaultheria procumbens*. **OLEUM BETULÆ.**—Oil of sweet birch. Oil obtained by distillation from the bark of *Betula lenta*. [These two oils being practically identical, one monograph will suffice.] *Characters and Tests*.—A colourless liquid having a strong characteristic odour and a pungent taste. S.G., 1.180 to 1.187; O.R., 0° to -1°; R.I., 1.537 to 1.539; Sol. 1 vol. in 6 of 70-per-cent. alcohol at 25° C. Should contain at least 99 per cent. of methyl salicylate determined by the saponification process.

OLEUM FENICULI.—Oil of fennel. The oil distilled from the fruit of *Foeniculum vulgare*. *Characters and Tests*.—Nearly colourless or pale yellow, having the characteristic odour of fennel and a pungent taste. S.G., 0.960 to 0.990; O.R., +6° to +20°; R.I., 1.525 to 1.534. Sol. in an equal vol. of 90-per-cent. alcohol. The melting-point after solidification should not fall below +4° C.

OLEUM THYMI.—Oil of thyme. The oil distilled from the fresh herb *Thymus vulgaris*. *Characters and Tests*.—Reddish brown in colour, having the characteristic odour of thyme and a pungent aromatic taste. S.G., 0.920 to 0.950; O.R., slightly laevorotatory (for this test the oil must be redistilled); R.I., 1.480 to 1.495; sol. 1 vol. in 2 of 80-per-cent. alcohol. It should contain not less than 25 per cent. of phenols (thymol and carvacrol) when tested by the process described under "Oleum Caryophylli."

The authors said that they did not put forward these monographs as by any means final, but with a view to eliciting criticism by those competent from manufacturing or scientific knowledge, and in that way to pass forward

to the Committee of Reference in Pharmacy for them to accept and pass on to the General Medical Council monographs which will be as perfect as possible, and in which the maximum of criticism will be obtained before the publication of the Pharmacopœia. The meeting at which the communication was read is reported in an earlier part of this issue.

Constituents of Red Clover Flowers.*

By Frederick B. Power and Arthur H. Salway.

THE flowers of the common red clover (*Trifolium pratense*, L.) have been used to some extent medicinally in recent years on account of their assumed alterative properties, and have even been recommended in the treatment of cancer. The only knowledge respecting their constituents has been a recorded statement that they contain tannin, resin, fat, and chlorophyll. It was therefore deemed of interest to subject them to a complete chemical examination. The material for this purpose was collected during the month of June from a field of cultivated red clover in Kent, each blossom, or flowering top, having been separately gathered in order to exclude the green, herbaceous parts of the plant. The weight of the material, when fresh, was 264 kilos., and after careful drying it amounted to 58.5 kilos., the loss in weight having been thus nearly 78 per cent.

The dried flowers were completely extracted with hot alcohol, and, after the removal of the greater portion of the alcohol, the resulting extract was distilled with steam. A small amount of an essential oil was thus obtained, which possessed a rather unpleasant odour, and was found to contain furfuraldehyde. The portion of the alcoholic extract which was soluble in water contained a large amount of sugar, but from it a considerable number of definite crystalline substances were isolated, several of which are new compounds. These substances may be briefly enumerated as follows: Salicylic and *p*-coumaric acids; isorhamnetin, $C_{16}H_{12}O_7$; pratol, $C_{15}H_{10}O_2(OH)(OCH_3)$, which apparently is a flavone derivative; pratensol, $C_{17}H_{14}O_2(OH)_2$; a yellow compound, $C_{16}H_{10}O_2$; a substance, $C_{17}H_{12}O_3(OH)_3$; a substance, $C_{11}H_{12}O_6$; and the new glucosides: trifolin, $C_{22}H_{22}O_{11}$, which yields on hydrolysis a yellow colouring-matter, trifolitin, $C_{16}H_{10}O_6$, and rhamnose; isotrifolin, $C_{22}H_{22}O_{11}$; and a glucoside which, on hydrolysis, yields quercetin, $C_{15}H_{10}O_7$.

The portion of the alcoholic extract which was insoluble in water consisted chiefly of resinous material, but from it the following definite compounds were obtained: myricyl alcohol, $C_{15}H_{24}O$; heptacosane, $C_{27}H_{54}$, and hentriacontane, $C_{31}H_{62}$; sitosterol, $C_{27}H_{44}O$ (m.p. 135°-136°; $[\alpha]_D^{20}$ -34.4°); a new dihydric alcohol, trifolianol, $C_{21}H_{34}O_2(OH)_2$; a mixture of fatty acids (consisting chiefly of palmitic, stearic, and linoleic acids); and a small amount of pratol, $C_{16}H_{12}O_7$, the last-mentioned having evidently been contained in the resin in the form of a glucoside. The dihydric alcohol, trifolianol, $C_{21}H_{34}O_2(OH)_2$, is homologous with ipuranol, $C_{23}H_{38}O_2(OH)_2$, and with the recently discovered citrullol, $C_{22}H_{36}O_2(OH)_2$ (from colocynth), the three compounds being apparently consecutive members of a series which is represented by the general formula $C_nH_{2n-6}O_4$. In connection with the isolation of the above-mentioned substances from red-clover flowers it is of interest to note that at least three of these—namely, myricyl alcohol, and the hydrocarbons heptacosane and hentriacontane—are also constituents of beeswax, the chief component of the latter being myricyl palmitate.

* Abstract of a paper communicated to the Chemical Society from the Wellcome Chemical Research Laboratories.

GERMAN POTASSIUM SALTS.—A Bill agreed to by the Federal Council, dealing with the sale of potassium salts, has been submitted to the Reichstag, together with an explanatory memorandum.

New Books.

Any of these books printed in the United Kingdom can be supplied, at the published price, to "C. & D." subscribers on application (with remittance) to the Publisher, 42 Cannon Street, London, E.C. These notes do not exclude subsequent reviews.

British and Foreign Guide to the Chemical, Drug, Oil, and Colour Trades. 11×7½. Pp. 85. (Adolphe Francis, Ltd.)

Cavers, F. *Senior Botany.* Cr. 8vo. Pp. 170. 4s. 6d. (Clive.)

Chemical Manufacturers' Directory of England, Wales, and Scotland. With some firms in Ireland, 1910. 8vo. Bds., 2s. 6d. net. (Simpkin.)

Clarke, H. *Studies in Tuberculosis.* 10½×7½. Pp. 64. 5s. net. (Constable.)

Clarke, J. J. *Congenital Dislocation of the Hip.* 8vo. 3s. 6d. net. (Baillière.)

Cornor, Edred M. *Male Diseases in General Practice.* An introduction to Andrology. 8vo. 8½×5½. Pp. 478. 15s. net. (Frowde.)

Fox, L. W. *Practical Treatise on Ophthalmology.* Ryl. 8vo. 11hr. 25s. net. (Appleton.)

Greoff, R. *Atlas of External Diseases of the Eye.* Trans. by P. W. Shedd. 4to. 42s. net. (H. K. Lewis.)

Hofmann, J., and Pohlmann, L. *Remedial Gymnastics for Heart Affections, used at Bad-Nauheim.* Trans. by J. G. Carson. Ryl. 8vo. 5s. net. (Sonnenschein.)

Hutchinson, Sir Jonathan. *Syphilis.* 7½×4½. Pp. 608. 10s. 6d. net. (Cassell.)

Hutchinson, W. *Preventable Diseases.* 8×5. Pp. 450. 6s. net. (Constable.)

Jamieson, Andrew. *Practical Elementary Manual of Magnetism and Electricity.* 8th edit. 7½×4½. Pp. 414. 3s. 6d. (C. Griffin.)

Joseph, M. *Short Handbook of Cosmetics.* 3rd edit., with 151 recipes. 7½×5. Pp. 98. 2s. 6d. net. (Rebman.) [Contains ninety-six pages and deals with cosmetics of the skin, hair, nails, and mouth. Consists chiefly of formulæ (many of them unworkable), and gives little information about disorders of the skin, nails, and mouth. A poor translation of an indifferent book.]

Knox, E. B. *Aids to Microscopic Diagnosis.* 12mo. 2s. 6d. net, swd. 2s. net. (Baillière.)

Lowe, H. *Paints for Steel.* 5th edit. Cr. 8vo. 4s. 6d. net. (Chapman & Hall.)

Mackenzie, J. *Diseases of the Heart.* 10×7½. Pp. 440. 20s. net. (Frowde.)

Macqwen, H. A. *Food Inspection. A Practical Handbook.* 8½×5. Pp. 264. 5s. net. (Blackie.)

Matriculation Chemistry Papers of the University of London, from January 1894 to September 1909. Cr. 8vo. Pp. 70. 1s. 6d. (Clive.)

McIsaac, I. *Bacteriology for Nurses.* Cr. 8vo. 5s. net. (Macmillan.)

Mortor, E. R. *Essentials of Medical Electricity.* 2nd edit. Cr. 8vo. 6s. net. (H. Kimpton.)

Muthu, C. *Pulmonary Tuberculosis and Sanatorium Treatment.* A record of ten years' observation and work in open-air sanatoria. 8½×5½. Pp. 214. 3s. 6d. net. (Baillière.)

Norman, G. M. *Systematic Practical Organic Chemistry.* 2nd edit. Cr. 8vo. Pp. 112. 1s. 6d. (Clive.)

Nurses' Guide to Prescription-reading. 5×3. Pp. 150. 1s. 6d. net. (Livingstone, Edinburgh.) [The author states in the preface that intelligent prescription-reading can be taught without considerable acquaintance with Latin, chemistry, pharmacy, and the allied sciences. He claims that he has got rid of technicality, and brought the subject within the reach of the nursing recruit. Weights and measures are first dealt with, and then follow simple directions for reading prescriptions and hospital cards, with a list of terms used in prescriptions. The latter part of the booklet is a kind of key to the names of galenicals, preparations, and drugs.]

Painton, G. H. *The Field Ambulance Guide.* 16mo. Limp 2s. 6d. (W. Clowes.)

Peckham, S. F. *Solid Bitumens.* Ryl. 8vo. 21s. net. (Spon.)

Robinson, H. *Midwife's Pronouncing Dictionary of Obstetrical and Gynaecological Terms.* 16mo. Pp. 84. 1s. net. (Scientific Press.)

Seymour, A. *Modern Printing-inks.* A practical handbook for printing-ink manufacturers and printers. 8½×5½. Pp. 92. 5s. net. (Scott, Greenwood & Co.)

Smith, E. *Some Common Remedies and their Use in Practice.* 7½×4½. Pp. 120. 3s. net. (H. K. Lewis.)

Stewart, R. W. *An Elementary Text-book of Physics.* Part 4. Heat. 7½×4½. Pp. 254. 3s. 6d. net. (C. Griffin.)

Sutherland-Gower, Lord Ronald. *Cleanliness versus Corruption.* 7½×4½. Pp. 50. 6d. (Longmans, Green & Co.) [An interesting but somewhat ghastly account of the advantages of cremation over earth-burial of corpses. The case for cremation, as the preferable method of disposing of bodies, is convincingly put.]

Swanton, E. W. *Fungi and How to Know Them.* Illus. 7½×5. Pp. 222. 6s. net. (Methuen.)

Messrs. Williams & Norgate have published at 12s. 6d. a book on "Beet-sugar Making and its Chemical Control," by Y. Nikaido, B.Sc., M.A., which deals with the fundamental principles involved in the various processes of the sugar-house, the methods of manufacture, and the analytical control of the processes. The book is well illustrated.

London Drug Statistics.

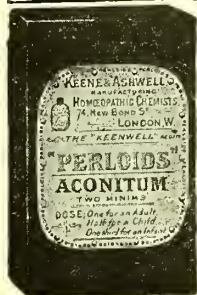
The following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of January 1910, and to the stocks on January 31:

	January		Stocks		1909	
	Landed	Delivd.	1910	1909	Imprtd.	Delivd.
Aloes.....cs. etc.	448	152	£94	470	448	152
".....gourds	—	—	209	1,280	—	—
Aniseed, star.....cs.	—	—	—	74	—	—
Arrowroot.....pkgs.	99	938	5,098	5,372	99	938
Balsams.....cks.	—	70	447	337	—	70
Calumba.....bgs.	3	1	53	189	3	1
Campbor.....pkgs.	737	1,476	1,957	967	757	1,476
Cardamoms.....	473	418	1,820	922	473	418
Cascara sagrada tons	10	6	410	538	10	6
Cinchona.....pkgs.	360	376	4,707	4,145	360	376
Cocculus indicus ..	—	—	—	—	—	—
Cochineal.....bgs.	44	46	493	853	44	66
Cubebs.....	—	19	16	115	—	19
Dragon's blood pkgs.	14	17	126	119	14	17
Galls.....	247	266	1,431	1,156	247	266
Gums—						
Ammoniacum ..	—	—	4	10	—	—
Animi.....	132	133	355	263	132	133
Arabic.....	299	657	5,326	5,151	299	657
Asafetida.....	239	79	298	124	289	79
Benzoin.....	195	197	1,263	670	195	197
Copal.....	4,211	3,395	22,859	26,371	4,211	3,395
Damar.....	911	305	5,229	3,040	911	305
Galbanum ..	—	—	—	—	—	—
Gamboge.....	16	16	132	145	16	16
Guaiacum ..	—	3	51	78	—	3
Kauri ... tons net	37	46	355	551	37	46
Kino.....pkgs.	—	—	42	123	—	—
Mastic.....	—	4	15	12	—	4
Myrrh, E.I.....	27	35	245	393	27	35
Olibanum ..	25	70	157	1,374	25	70
Sandarac.....	75	90	3.8	487	75	90
Tragacanth.....	804	737	3,009	4,347	804	737
Ipecacuanha—						
Cartagena ..	10	9	61	24	10	9
E.I.....	—	21	23	20	—	21
Matto Grosso ..	4	34	55	79	4	34
Minas.....	3	—	20	46	3	—
Jalap.....bbs.	8	4	11	3	8	4
Nuxvomica .pkgs.	—	51	1,235	741	—	51
Oils—						
*Aniseed, star...cs.	10	15	52	29	10	15
*Cassia.....	—	2	55	109	—	2
Castor.....pkgs.	56	41	121	277	56	41
Coconut.....tons	30	57	189	1,437	30	57
Olive.....pkgs.	183	182	1,168	1,711	183	182
Palm.....tons	—	—	7	2	—	—
Quinine.....lb.	10,950	9,304	206,767	204,675	10,950	9,304
Rhubarb.....pkgs.	110	64	527	823	110	64
Sarsaparilla ..bbs.	124	57	545	229	124	57
Senna.....pkgs.	945	242	1,737	893	945	242
Shellac.....cs.	8,966	3,621	61,692	46,469	8,966	3,621
Turmeric.....tons	5	21	279	249	5	21
Wax—						
Bees'.....pkgs.	357	340	1,692	1,936	357	340
Vegetable.....cs.	450	96	1,121	260	450	96

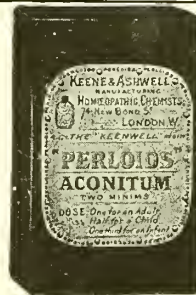
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Acetanilid,
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ESFON

The
Nerve
Food.

ESFON

A Powder-Food that CURES.
Reinforces the NERVES.
Strengthens the system.
Appeals especially to Vegetarians.
Most palatable and really curative.
Interesting booklet on the relation
of food to the nervous system.
A booklet on the counter and the
Food sells itself.
Minimum retail price, 1/6, 3/6, 6/6.

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A quick-selling and effective Cure for
Eczema, Piles, and all Skin Diseases.



SOAP, OINTMENT,
and SUPPOSITORIES.

EXTENSIVELY ADVERTISED to the GENERAL
PUBLIC and in CONSTANT DEMAND.

Chemists are invited to write for free samples
and advertising matter.

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18 & 19 QUEENHITHE, UPPER THAMES STREET, LONDON, E.C.

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PEPSINE.

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T. MORSON & SON,
14, ELM ST GRAYS INN R^d

LONDON. W.C.

ALKALOIDS.

PRECIPITATED Creta PRÆCIP. CHALK.

The
Well-Known



"Sturge's
Chalk."

All grades from the **FINEST LIGHT** to **VERY DENSE**.

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Is recommended to all Sufferers from

Gout, Rheumatism, Nervous Disorders and in all forms of **Skin Diseases.**

The Bath is prepared by dissolving PIUTINOL in your Bath at Home.

Relieves Pain and induces Refreshing Sleep.

Price **2/-** per bottle.

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COCAINE

MORPHINE

CODEINE

and their Salts.

Narcotine

Cotarnine

C. H. BOEHRINGER SOHN,

For prices please apply to my agents:

F. W. BERK & CO., LTD., 1 Fenchurch Avenue, **LONDON, E.C.**

Nieder-Ingelheim-on-Rhine.

"DIAMALT" = The Purest and Highest
IS Diastasic Malt Extract
= on the Market.

"DIAMALT" with COD LIVER OIL is MATCHLESS.

The **"British Medical Journal,"** November 20, 1909, reported upon eleven leading proprietary malt extracts, the **DIASTASIC POWERS** being as follows:—

1. 380	4. 366	7. 1060	9. 38
2. 23	5. 86	8. 382	10. 866
3. 39	6. 940		11. 0

No. 7 is DiaMalt, and the complete analysis showed:

Total Solids 74 per cent.	Dextrin 12.7 per cent.
Reducing Sugars (calculated as maltose) 63.9 per cent.	Ash 1.2 per cent.
Protein 6.52 per cent.	Diastasic Power 1060.

See for yourself, by reference to the **"B.M.J."** of November 20, what the other ten are.

DiaMalt Preparations give the Chemist **30 per cent.** **CLEAR PROFIT**, secured by the P.A.T.A.; besides, he sells the preparations under a guarantee, thereby enhancing his reputation; and DiaMalt is the Extract which the Medical Profession now know is at the top.

Obtainable from all Wholesale Houses or direct from

THE BRITISH DIAMALT CO., 11 & 13 Southwark St., London, S.E.

Samuel O'Neill & Sons, Ltd.

CASTLETON, Near MANCHESTER.

MAKERS OF

**TOILET
ROLLS.**

Patentees and Makers of Paper Tubes for
Flax, Cotton, Woollen, Worsted & Silk Spinners,
Winders, &c.

The Successful Chemist

of the Present Day is the Chemist who adapts himself to Present Day Methods.

It is an acknowledged fact that advertising matter of good character is exceedingly beneficial.

Your Specialities perhaps require a good fillip.

Good, Attractive and Catchy

Printing will give the desired result.

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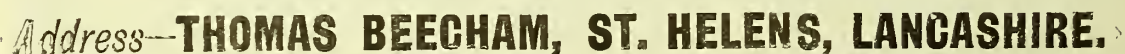
Sample Set to Colonies, **10/6**, which amount we credit for a **£5** order.

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KIRKSTALL ROAD, LEEDS.

in 11 lbs. and 3 cwt. blocks. Full stock kept in London. We brand sticks all the year round with buyers' own Trade Mark. Write for Samples and Prices



FOR UPWARDS OF FORTY YEARS THE USE OF

Fellows' Syrup of Hypophosphites

HAS BEEN RECOMMENDED BY

The Leading Medical Specialists in all Countries

Reject < Worthless Substitutes
Preparations "Just as Good"

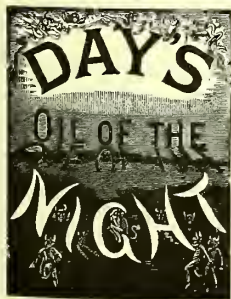
ATKINSON & BARKER'S ROYAL INFANTS' PRESERVATIVE

ON P.A.T.A. LIST.

Prices and Terms on application to R. BARKER & SON,
11 Russell Street, C.-on-M., MANCHESTER.

DOES
NOT
CONTAIN
any
SCHEDULED
POISON.

DAY'S OIL OF THE NIGHT



The great household Remedy for Chest Colds, Sore Throat, Rheumatism, Sciatica, & all aches & pains,

"A positive pain killer."—DR. GORDON STABLES, R.N.

Advertised Prices ... 1/1½ and 2/9 per bottle.

Trade Prices ... 10/- and 25/- per dozen.

CARRIAGE PAID.

Proprietors :—DAY & SONS, CREWE, LTD., CREWE.

"JOHN BULL" MALT EXTRACT

"PACO" DIASTASE BRAND.

A Malt Extract that Chemists can sell with credit and with profit.

	1 lb.	2 lb. (32 ozs.)		1 lb.	2 lb. (32 ozs.)
Selling Price ...	1/6	2/6	Price to Chemists ...	1/-	1/9
Protected Price ...	1/4	2/4	Minimum Chemists' Profit	4d.	7d.
				33½%	33½%

"The Chemist and Druggist's" Testimony.

"PACO" DIASTASE MALT EXTRACT.—Messrs. Paine & Co., Ltd., Maltsters and Malt Extract Manufacturers, St. Neots, whose "John Bull" Malt products are well-known to Pharmacists, have recently introduced a malt extract of high diastatic value, which they guarantee to have a power of 100° Lintner. We have examined a sample of this extract and found it to be excellent in flavour and appearance. Its diastatic activity on the Lintner scale is 148°—a strength which is exceptionally high, since it is equal to an extract of 1800° tested by the more empirical B.P. Codex method. This result has been corroborated by Mr. E. R. Ling, F.I.C., F.O.S., a well-known authority on malt, who informs us that he has not met with an extract of higher diastatic power. Messrs. Paine & Co. inform us that they are putting the extract on the market in 1-lb. and 2-lb. jars, and they will be glad to furnish buyers with further particulars on application.

"The Pharmaceutical Journal" says:—

MALT EXTRACT.—An examination of a sample of "John Bull" Malt Extract ("Paco" Diastase Brand), received from Messrs. Paine & Co., Limited, St. Neots, shows that it is exceptionally high in diastase and in total nitrogenous constituents. It is of agreeable flavour and excellent appearance. The figures obtained by us on analysis are:—

Total Solids ..	79.6 per cent.	Diastase Power in Units of "Codex," Test 1,724, in Degrees Lintner 132.	
Reducing Sugar, calculated as maltose ..	70.0 per cent.	Ash ..	1.8 per cent.
Protein, calculated from nitrogen found ..	7.9 per cent.	Messrs. Paine & Co., Limited, also sent us a sample of malt extract, specially prepared, to show what they could do in the manufacture of still higher diastase strength, and the figures obtained on examining this sample are:—	
Total Solids ..	79.4 per cent.	Diastase Power in Units of "Codex," Test 2525, in Degrees Lintner 210.	
Reducing Sugar, calculated as maltose ..	65.4 per cent.	Ash ..	1.8 per cent.
Protein, calculated from nitrogen found ..	8.5 per cent.	They inform us that their "Paco" Diastase brand is being placed on the market in 1 lb. and 2 lb. jars at protected prices, which show a profit to the retailer of 33½ per cent.	

This analysis shows "Paco" to be far superior to all other makes as shown in the analyses published in the *British Medical Journal* of November 20 (pp. 1477-1478), to which readers should refer, or to whom we will send a copy on receipt of trade card.

PAINE & CO.

MALTSTERS AND
MALT EXTRACT
MANUFACTURERS

ST. NEOTS, Huntingdonshire.

HORNER & SONS

CAN GIVE YOU

THE

BEST QUALITY

at the Lowest Prices and in the Shortest Time

OF

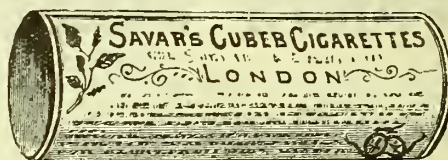
Pot. Bromide, Sandalwood Oil,
VITTORIA Liquorice Juice,
Honey, Otto of Orris, Quinine,
Castor Oil, Jalap, Assafœtida,
Aloes, Rhubarb,

AND ALL

Drugs, Chemicals, Essential
Oils, &c.

24 GEORGE STREET, TOWER HILL, E.C.

SAVAR'S CUBEB CIGARETTES



A Real Relief in
ASTHMA, CATARRH, & THROAT COUGHS

On P.A.T.A. List.

1/- & 2/6 boxes; minimum retail prices, 11d. & 2/3,
8/6 & 20/- dozen net.

A Beautiful Showcard on Application.

EVANS SONS LESCHER & WEBB,
LIMITED.
LONDON and LIVERPOOL.

FREEMAN'S CHLORODYNE

(THE ORIGINAL AND ONLY TRUE)

Invented by Richard Freeman, Pharmacist, in 1844.

A recognised specific for Coughs, Colds, Asthma, Bronchitis, Neuralgia, Influenza, Diarrhoea, Dysentery, Colic, Cholera, Gout, and Fevers of all kinds. Freeman's Chlorodyne is used and recommended by the Profession, and is the one Chlorodyne that does not cause headache. It is essentially different from any other and cannot be imitated.

At the advertised prices Freeman's Chlorodyne yields you 60% profit, and even when sold at Store prices there is still 2d. profit on each small bottle—very fair, don't you think, for merely handing the article over your counter?

	Advertised @ per bottle.	Wholesale per dozen.	Special terms for large quantities.
No. 1 size.	1/1½	8/6	
No. 2 "	2/9	21/-	
No. 3 "	4/6	36/-	

Substitutes
will NOT give
your customers
the same degree
of
satisfaction.

FREEMAN'S CHLORODYNE, LTD.
70 KENNINGTON PARK ROAD,
LONDON, S.E.



J. H. Wolfensberger & Co., Basle, SWITZERLAND.

OFFER FOR OVERSEA COUNTRIES

DIETHYLBARBITURIC ACID & SODIUM SALT. SILVER PROTEINATE. TANNIN ALBUMINATE. PHENAZONE DERIVATIVES. DIMETHYLAMIDOPYRAZOLON & DERIVATIVES, ETC.

Where not represented, active agents wanted.



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MAGNESIA**

CARBONATE, CALCINED, AND FLUID.

THE WASHINGTON CHEMICAL CO., LIM., WASHINGTON, COUNTY DURHAM, ENGLAND.

London Agents: MESSRS. CLIFFORD CHRISTOPHERSON & CO., 21 Mincing Lane, London, E.C.

MÖLLER'S (Hydroxyl-free) COD LIVER OIL.

THE ONLY COD LIVER OIL THAT DOES NOT REPEAT. 22 FIRST PRIZES.

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Sold in capsuled bottles only (8 and 16 oz).

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WHOLESALE DRUGGISTS,
Late 65) Bath St., City Road,
LONDON, E.C.

Telephone: "3593 CENTRAL"

GELATINE-COATED DOG & FOWL
PILLS. Samples Free.

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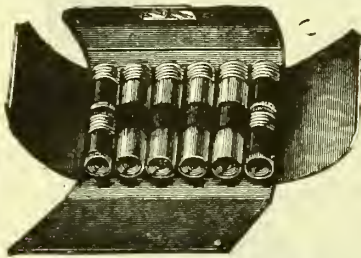
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GELATINE CAPSULED
HORSE BALLS**

Alternative, Condition, Cordial, Cough,
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TOOGOOD'S

Family and Ships'
Medicine Chests,
Accident Emergency Cases,
Tablet Cases, etc.

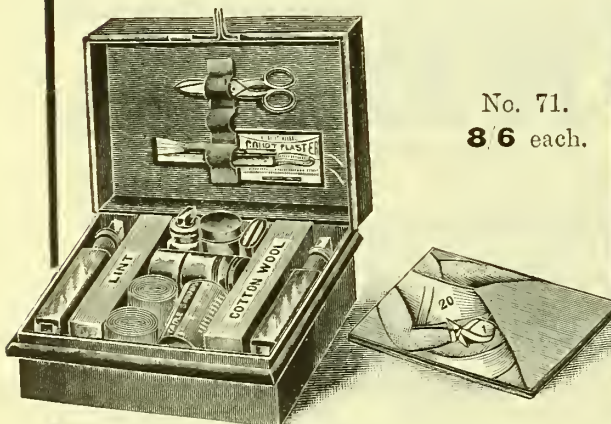


No. 64.
Tablet Case,
7/- each.



No. 60.
Tablet Case,
6 3 each.

The Motor Car
Accident Emergency Case.



No. 71.
8 6 each.

Full Illustrated Catalogue will be
sent on application.

WILLIAM TOOGOOD, Ltd.
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Elastic, Rubberless, Washable, Hygienic, Fast Edges, Cool, Light, Porous.

CRÊPE BANDAGES.

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From 3/9 doz. In all widths and qualities. Manufactured by—
THE NORWICH CRÊPE CO. (1856) Ltd., St. Augustines, NORWICH.
Samples Free. Special Terms for Quantities.

INDEX and BUYERS' GUIDE

See pages 7 to 11.

DISPENSING BOTTLES & PHIALS

I. ISAACS & CO.'S REDUCED PRICES

106 MIDLAND ROAD, ST. PANCRAS, LONDON, N.W.1

The New Shape, Oval Fronted Bottles, 6 ounce size, 8 6 per gross
A Sample Free on Application.

FIRST QUALITY.

3 & 4 6 & 8 12 16 ounce. } Round edges, plain or
9/- 10/- 15/- 20/- per gross } graduated, quinine tinted.

SECOND QUALITY.

3 & 4 6 & 8 12 16 ounce. } Round edges, plain or
7/6 8 6 12/- 18/- per gross } graduated, clear blue tinted.

PANEL BOTTLES (New Series), Green or Blue Glass.
Good Quality.

2 2 1/2 4 6 8 10 ounce. } In ordering please say if
7/- 7 6 8/- 9/- 9 6 12/- per gross. } green or blue is required

WHITE PHIALS—GOOD QUALITY.

3 6 4 1 1 1/2 2 ounce. } Plain or teaspoons.
5 6 4/- 4 6 5 6 per gross }

Six gross and upwards, assorted or otherwise, sent carriage paid to any
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Established 120 years. Bankers: London County and Westminster Bank.

The Original and only Genuine

Allcock's

POROUS PLASTERS

A REMEDY OF 60 YEARS' STANDING.

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Allcock's Corn and
Bunion Plasters
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*The
Three
Reliables.*



A HANDSOME
SHOWCARD
will be sent
free of cost
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"Sold all round the World."

Telegraphic Address—
"ELEVEN LONDON."

MAW'S

Telephone No.—
LONDON WALL 3230 (4 lines).

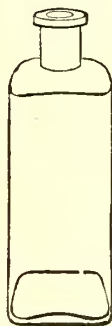
DISPENSING BOTTLES.



DISPENSING.
Fig. 1273.



OVAL.
Fig. 1274.



DIRECT SQUARE.
Fig. 1275.

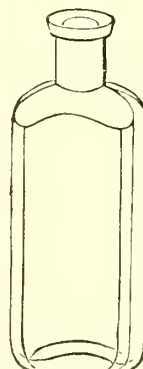


Fig. 1276.



OVAL-FRONTED
FLAT.


Prices in Crates of 6 to 8 Gross. CRATES FREE.

Not less than 1 gross of a size and graduation, 2 to 8 ounces.


EXPORT PACKAGES CHARGED AT NET COST F.O.B.

GREEN FLINT, **MAW'S**, WITH TRADE MARK—  **SUPER**

2	3 & 4	6 & 8	10	12	16	20	24	32	40	OUNCE.
11/3	13/-	14/3	22/-	22/-	26/6	32/9	39/-	52/9	59/-	PER GROSS


GREEN FLINT, **MAW'S**, WITH TRADE MARK— 

2	3 & 4	6 & 8	10	12	16	20	24	32	40	OUNCE.
7/6	8/10	9/6	14/-	15/-	19/6	22/-	28/-	32/-	38/-	PER GROSS.


QUININE TINT, **MAW'S**, WITH TRADE MARK— 

3	4	6	8	10	12	16	20	OUNCE.
10/10	10/10	11/5	12/-	16/-	18/9	23/3	27/-	PER GROSS.

Prices ex Warehouse.

GREEN FLINT, **MAW'S**, WITH TRADE MARK—  **SUPER**

2	3 & 4	6 & 8	10	12	16	20	24	32	40	OUNCE.
11/4	13/3	14/9	22/6	22/6	27/6	33/9	40/-	54/9	61/-	PER GROSS.

GREEN FLINT, **MAW'S**, WITH TRADE MARK— 

2	3 & 4	6 & 8	10	12	16	20	24	32	40	OUNCE.
7/10	9/2	10/-	14/6	16/-	20/6	23/-	29/-	33/-	40/-	PER GROSS.

VIALS, WHITE MOULDED, GOOD QUALITY.

Long, Medium, Short or Round Shouldered.

2-dr.	1/2-oz.	1-oz.	1 1/2-oz.	2-oz.	3-oz.	4-oz.
4/-	4/4	4/7	5/8	6/2	8/2	8/8

PER GROSS.

Usual Discount.

S. MAW, SON & SONS, 7-12 ALDERSGATE STREET, LONDON, E.C.

AIR CUSHIONS

GUARANTEED FOR 2 YEARS.

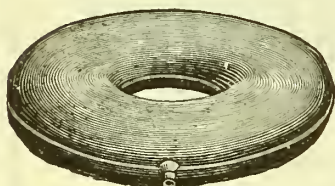


Fig. 1194.

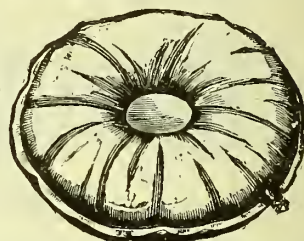


Fig. 1196.

NOTE THE LOW PRICES

	DIA.	12	13	14	15	16	17	18	20
Fig. 1194.—Red Rubber circular Cushion, each	...	5 0	5 6	6 0	6 6	7 0	7 9	8 9	11 0
Grey " " " "	...	4 6	5 0	5 6	6 0	6 6	7 0	8 0	10 0
958.—Drab proof " " " "	...	4 6	5 0	5 6	6 0	6 6	7 0	7 6	9 0
1351.—Sateen " " " "	...	5 0	5 6	6 0	6 6	7 3	8 0	9 0	11 0
1196.—Drab proof circular Pillow " " " "	...	3 6	4 0	4 6	4 10	5 3	5 9	6 3	7 6
1350.—Sateen " " " "	...	3 9	4 3	4 9	5 3	6 0	6 9	7 6	9 0
1353.—Red rubber square Cushion " " " "	8 6	9 6	10 6	12 0	13 6	16 6

NOTE.—Owing to the recent enormous rise in the price of raw rubber, we are compelled to add an advance of 10 % on above prices.

The red rubber cushion, Fig. 1194, is the popular line and is unequalled at the price and quality of the rubber.

We guarantee **all** our Cushions and will replace free of charge any not found satisfactory.

5 % discount allowed for prompt cash off above prices. Carriage paid on orders of £2 and upwards.

OUR GOODS ARE RIGHT AND PRICES LOW.

WRITE FOR NEW ILLUSTRATED PRICE LIST, POST FREE.

BURGE, WARREN & RIDGLEY, Ltd.

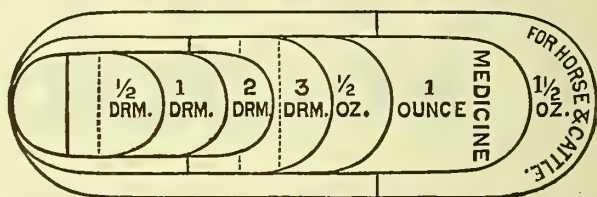
91 & 92 GREAT SAFFRON HILL, LONDON, E.C.

PLANTEN'S EMPTY CAPSULES

**FOR HORSE BALLS,
CATTLE AND DOG
MEDICINES.**

SAMPLES FREE UPON APPLICATION.
Supplies can be obtained through
any Wholesale House, or direct
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MASON BROS. & CHAPMAN,
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SOLE AGENTS FOR ROCHE'S HERBAL EMBROCATION,

Burchell's Anodyne Necklaces; Ford's Balsam of Horehound; Bertelli's Catramin Pills, &c.; Bovine, a perfect Invalids' Food; Pacita, remedy for Horses, Dogs, &c.; Balm of Bethesda; C. & A. Oldridge's Balm of Columbia; Gombault's Veterinary Preparations; the Oleusaban Eucalyptus Disinfectants; Clark's Neuralgic Tincture; Ibeson's Foot Rot Ointment; Woolley's Candy; Digena Tea; Nolene Preparations; Seymour, Hamilton & Co.'s Preparations.

Special Agents for the Concentrated Liquors and other preparations of Messrs. Fletcher & Fletcher.

PRICE LISTS SENT ON APPLICATION.
ORDERS CAREFULLY AND PROMPTLY EXECUTED.
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Jules Lang & Son, ——— 16 Bury Street, ———
St. Mary Axe, LONDON, E.C.

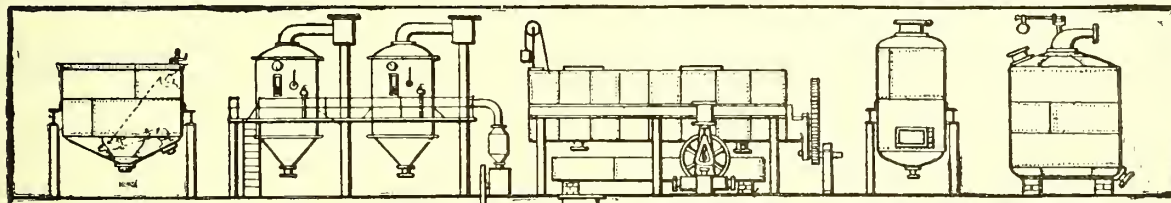
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Warehouse : BERMONDSEY.

**THIS BUSINESS WILL BE
CARRIED ON AS HERETOFORE.**

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GLYCERINE PLANT. E. FORSHAW & SON, LTD. FANCY MILLED SOAP PLANT.

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Perfume, Screw-capped, and Medical Bottles of all kinds,
Graduated Measures, Druggists' Sundries.

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PRECIPITATED CHALK.

EXTRA LIGHT AND ALL GRADES TO SUIT EVERY PURPOSE.

CHEAPEST SELLERS IN THE MARKET.

AUG. LEVERMORE & CO., 8, 9 & 10, Great St. Helen's, LONDON, E.C.

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Precipitated Chalk, Hyposulphite of Soda, Sulphite of Soda, Glauber Salts, Epsom Salts, Salts of Tartar, Alum, Sulphite of Lime, Sulphide of Sodium.

E. BRAMWELL & SON, ST. HELEN'S, LANC.

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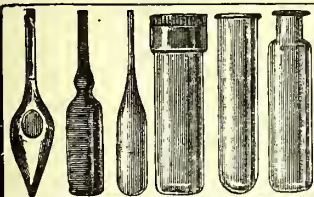
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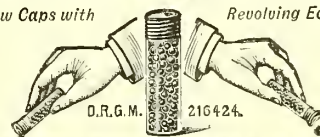
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OFFICE: 42 CANNON STREET, E.C.

SATURDAY, FEBRUARY 12, 1910.

TO ADVERTISERS IN THIS SUPPLEMENT.

The Publisher desires to make it clear that advertisements of Businesses for Disposal and Wanted, Situations Open and Wanted, Exchange Column, &c., **MUST BE PREPAID** (except in the case of serial advertisers) and to ensure prompt insertion **REMITTANCES MUST ACCOMPANY INSTRUCTIONS.**

Advertisements for the current issue cannot be received after 4 p.m. on Thursday in each week. If it is necessary to telephone or telegraph an urgent announcement this may be done

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at the same time and the fact made clear that the money order is to be delivered at 42 CANNON STREET, LONDON, E.C. Advertisers will assist greatly in the preparation and quick despatch of the Supplement by making careful note of these rules.

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2.—THAMES VALLEY.—Good middle-class Business; Retail and Dispensing; returns £700; scope for development; *net profit* £200; attractive, well-fitted shop, double fronted; convenient house, side entrance; terms, goodwill £50 and valuation.

3.—LONDON, S.E.—Main thoroughfare; General, Retail, Prescribing, and Photographic trade; returns £1,300, which produce a *net income* of £300; roomy shop, well stocked; price £850.

4.—FULHAM.—Retail, Dispensing, Prescribing, and Photographic trade; returns between £600 and £650; *net income* £225 (proof given); price £425.

5.—LONDON (West End).—Old-established Business; Retail and Dispensing; returns £600 (about); *net profit* one-third; immediate sale desired; full investigation invited; no reasonable offer refused.

6.—LONDON, N.—Busy locality; ready money Retail and Prescribing Business; established 20 years and held by vendor 17; returns average £955; profit (after all expenses paid) £276; rent £50; new lease will be granted; price £400.

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9.—LIVERPOOL.—Old-established Business; Retail, Dispensing, and Photographic; returns average £1,092; *net profit* £280; price £1,000; illness cause of sale.

10.—CORNWALL.—Old-established Business; Retail and Dispensing; position unique; returns £1,400, at fair prices; terms £50 and valuation of stock and fixtures.

11.—YORKS (Market Town).—General, Retail, and Photographic trade; returns between £700 and £750 per annum; *net income about* £230; good roomy house; excellent position; rent £45; held on lease; valuation terms entertained.

12.—NORTH WALES.—Modern Pharmacy, Retail, Dispensing, and Photographic; returns £1,200 (average); handsomely-fitted shop, fully stocked; price £1,250.

13.—SUSSEX.—Unopposed Business; returns, present rate, about £10 weekly; scope for large development; intending investors with about £200 at command will find this an excellent investment.

14.—EASTERN COUNTY (Market Town).—Store Business; position unique; returns £1,500; roomy premises, held on lease; terms, valuation of stock and fixtures.

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2.—LONDON, N.—Cash Retail in fine situation; returning £700 to £750 per annum, and increasing; splendidly-fitted shop; good house; good reasons for disposal; price £335; part can remain.

We have for Sale several genuine Businesses about this price in London and Suburbs. Bona-fide applicants can have further particulars of these upon application.

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4.—MIDLANDS.—In healthy suburb of large manufacturing town: Light Retail, Prescribing, and Dispensing; fine commanding corner position, with good house attached; Returns about £700; valuation about £400; can be greatly increased.

5.—LONDON, S.W.—Good-class Retail and Dispensing; returns £1,120; net profits £350; old established; good house; price £850.

6.—LANCS.—High-class Retail, Prescribing; in popular health resort on coast; returns over £1,000; fine opening for Dentistry and Photo; books kept, and open to a real genuine buyer; price valuation about £750.

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3.—BERKSHIRE.—Good-class Retail, Dispensing, and Photographic Business; returns over £850; large house and garden; large, well-fitted shop, heavily stocked; price £525, or valuation.

4.—GLOUCE.—Good-class Retail, with large sale of own Specialities; returns £750 to £800; fine corner shop, well fitted and stocked; good market town; price £550.

5.—EAST COAST.—Unopposed Light Retail Business; no Mixed or heavy trade; returns average £800; good house; low rent; well-fitted shop, heavily stocked; price £465; a bargain.

6.—LONDON, S.E. (Death Vacancy).—Well-established Business; returns about £1,800, scope for increase; splendid main road position; stock and fixtures worth £600; price £750.

7.—NORWOOD.—Good-class Retail and Dispensing Business; returns £600; net profit £190; growing district; low rent; well fitted and stocked; price £350; strongly recommended.

8.—LIVERPOOL.—Cash Retail Dispensing and Prescribing Business in fine main-road position; returns £1,034; plenty of scope; large house; stock and fixtures worth £900; price £1,000.

9.—NEWCASTLE-ON-TYNE (near).—General Light Retail, with profitable side-lines; returns £762; net profit £200; large shop in main-road position and well stocked; price £500.

10.—WEST OF ENGLAND.—Old-established Light Retail Business; no Patents sold; returns £500; net profit £175; main-road position; can be much increased; price £300, or valuation.

11.—STAFFS.—Sound Mixed Retail Business in splendid position of important market town; returns £500; can easily be doubled; net profit £200; price £350 or simply valuation.

12.—DERBYSHIRE.—£120 will secure a genuine unopposed Light Country Retail Business; returning £500 under management; very low rent; corner shop, well stocked; this is a bargain seldom offered; only requires seeing; full value even at £200.

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14.—LONDON, N.W.—Light Cash Retail, Prescribing, and Dispensary Business; returning over £650; good profits; well-fitted shop; good stock; convenient house, bathroom, etc.; price £350.

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LIVERPOOL.—High-class Light Retail and Family Dispensing Business in Sefton Park, Liverpool (south end), for immediate Disposal owing to death of proprietor; rent £50; returns £800 per annum. Further particulars apply Langton & Macconnal, 22 Lord Street, Liverpool.

LONDON SUBURB.—Main thoroughfare; good-class neighbourhood; well-fitted shop; good house, side entrance; scope for large increase; suit a beginner; cheap; what offers? 190/1, Office of this Paper.

LONDON, N.—Valuation stock and fixtures, or near offer; good medium-class Retail and Dispensing; returns over £600, and net profit £175; nice house with side entrance; splendid opening for Dentistry; satisfactory reason for selling. Apply (letter only), "J. H.," 29 Grange Road, N.

LONDON, N.W.—The chance of a lifetime; extremely profitable Cash Retail and Prescribing; no heavy trade; net profit last year over £230; qualified man would easily double; investigation courted; thoroughly genuine bargain; books kept and references exchanged; price asked less than value of stock and fixtures for quick sale. "N. N." (194/3), Office of this Paper.

MANCHESTER.—Old-established, profitable, Retail and Prescribing Business; in busy neighbourhood; few Patents; no heavy trade; taking about £7; scope for increase; plate-glass, double front; good house; low rent; must be sold; first reasonable offer accepted. B. Woolley, Gees & Co., Ltd., Victoria Bridge, Manchester.

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MONMOUTHSHIRE.—Good-class Light Country Retail Business; in best position of good market town; slight opposition; returns about £650 under manager; principal would quickly do £800; rent £36; well fitted and well stocked; price £425 or reasonable offer; splendid chance for energetic man. "Severn" (193/21), Office of this Paper.

NEAR MANCHESTER.—Must be Sold, well-established, good Light Retail, Prescribing, and Photographic in growing district; practically no opposition; few Patents; returns about £400; price, valuation, about 200, or nearest offer; excellent reasons for disposal. 190/26, Office of this Paper.

NEWINGTON GREEN, N.—Lofty Shop and two rooms under middle-class residential mansions; Light Retail at fair prices; good stock and fixtures; Photo goods, Dentistry, and Optics untouched; rent, rates, gas about £1 weekly; sacrifice £85; call and view; circumstances explained. "Chemist," 3 The Parade, Newington Green Mansions, Newington Green, N.

NORTHERN COUNTY (important rising Coast resort).—Light Retail, Dispensing, and Photographic Business, conducted on cash lines, for Sale; average turnover about £50 monthly, increasing; scope for Prescribing, Dentistry, Optical; shop newly fitted West-End style; genuine references required; no agents. 190/15, Office of this Paper.

SCOTLAND, NORTH.—In health resort, old-established Country and Photographic Business, with small Branch for Sale; returns under manager, £900; splendid opening for Optics and Dentistry; position best in town; capital required, £300 or over; part could remain. Full particulars, 191/10, Office of this Paper.

SOUTH COAST.—A good Dispensing Business, with fine opportunities and at low price; suitable for young man with small capital, low personal expenses and some enterprise; full particulars to bona fide inquirers. "Malourea" (193/18), Office of this Paper.

SUNDERLAND.—Light Retail and Dispensing; returns £700; capital house; low rent; good-class suburb; capable of increase; owner going into Medical; must be sold; price £350. F. W. Smith, Chemists' Valuer, 3 Belgrave Terrace, Leeds.

ULVERSTON (Centre of Lake District).—Commodious premises, vacant May, including Shop, House, Warehouse; situate centre of town; a profitable Chemist's business has been carried on for about 80 years; principal market town in Furness; exceptional opportunity for man with small capital; rent moderate. Apply, T. Radnall, Dalton-in-Furness.

A BARGAIN for cash; Retail and Prescribing Business, S.W., about 10 miles from Waterloo; returns £400 under manager, increasing; good corner, double-fronted shop; healthy house and district; low rent; valuation about £150; open to any reasonable offer; must be sold, good reason; every investigation to bona fide purchaser. 189/37, Office of this Paper.

ABSOLUTE bargain; Branch Business, 10 miles from Waterloo; must be sold; handsomely fitted corner shop; splendid opening for Optics, Dentistry, and Stationery; rent £30; splendid chance for beginner, with a big future before it; rising neighbourhood; no hesitation in buying when seen; price asked is less than cost of fixtures. Address, "Saleable" (192/1), Office of this Paper.

DENTAL Practice for Disposal; splendid position in busy main road; London suburb; large private house; rent £42; let off 11s. 6d. weekly; returns about £350, at good fees; price £150; this is an exceptional opportunity for a man commencing. 194/14, Office of this Paper.

GOOD opportunity for qualified or unqualified man; Light Cash Retail and Prescribing Business; on busy Liverpool thoroughfare; returns under unqualified man £365; well stocked and fitted; cash price £120, or stock and fixtures reduced if desired for suitable man; investigation allowed; very profitable trade; lease. Write, "Bargain" (187/36), Office of this Paper.

PRETTY SUBURB, LONDON.—Business established 20 years; principally Dispensing and Prescribing; doing £8 weekly; Optics, Dentistry, Photography in demand; fine, well-fitted shop; good, useful stock; desirable house; plenty accommodation; rent £45 per annum; agreement or lease; side entrance, gardens; adjoining 2 stations, trams, etc.; all at £250 or valuation; household goods sold if desired. "Devinus" (189/30), Office of this Paper.

BUSINESSES FOR DISPOSAL

(continued.)

TO be given away, Light Retail, Prescribing, etc., in large village; unopposed: returns £600; could do £1,000; vendor living at a distance will give this business away for £120, much less than value of stock and fixtures. Brett & Co., Valuers, 73 Laurel Road, Leicester.

£100.—Busy centre; unopposed; absolutely best position established market thoroughfare, N.W.; surrounded by dense population, considerable proportion first class; will appeal to business builder; near Lipton's, Home and Colonial, Fitch, Pearks', Sainsbury's shops; other trades represented by real live firms; Dentistry addition would meet pressing want; aged vendor's breakdown demands retirement. 193/27, Office of this Paper.

£400 immediately will purchase nicely-fitted Pharmacy in Borden Town; returns £670, increasing; owner going abroad. 188/30, Office of this Paper.

£650.—London; well-established Stores; large stock; Drug orders from three medical men; good opening for Dentistry; also about 1 doz. good-selling Proprietaries; cause of sale family bereavement. Further particulars apply 192/32, Office of this Paper.

£2,000 returns (over). — Good-class Country Retail and Mineral-water Plant, in excellent going order; net profit £600; price £2,000, or £200 goodwill and stock, plant, etc., at valuation; or Partner capable of taking entire charge would be entertained. "Solicitors" (73/3), Office of this Paper.

BUSINESSES WANTED.

LONDON.—Two pharmacists require, in London or suburbs, a Business returning not less than £1,500; capable of increase; available capital £500. Full particulars to "P. B." (191/33), Office of this Paper.

ADVERTISER requires a good-class Business in London or suburbs; returns between £750 and £1,500; cash ready. In confidence, "P. R." (188/40), Office of this Paper.

ADVERTISER requires sound business for cash with returns £1,600 to £3,000 in a healthy neighbourhood; state particulars, including kind of business, house accommodation, rent, net profit and price, and whether there are any Side-lines. 174/7, Office of this Paper.

BUSINESS wanted, at once, returning about £1,000 per annum. Send full particulars, in confidence, to "H. A." (191/1), Office of this Paper.

CHEMIST'S Business in Manchester or Liverpool district wanted: takings £500 to £1,000. Please give full particulars in first letter to "Spirito" (189/15), Office of this Paper.

MESSRS. BERDOE & FISH desire to inform intending vendors that they have a number of cash buyers still unsuited and desirous of purchasing Businesses returning from £800 to £2,000; strictest confidence can be relied upon and a speedy transfer assured. Address, 35 Jewry Street, Fenchurch Street, E.C.

FOR SALE.

BEST OFFERS.—Dispensing-scales, as Maw's 1917, adjusted Avery, stamped Birkenhead January 1909; small steel hand-dispensing-scales; Counter-scales, 4 ft., old-fashioned, box, lever, Avery; Suppository-mould, 24; C. & D. Diaries, '06, '07, '08, '09; Hot-air Vapour Bath, Maw's 543; bent-glass mahogany Tooth-brush Case, 3 plush-lined shelves; 5 Hypodermic Vaporoles, pituitary extract; 9 ls. "Practical Photography" (Barclay); 20-cell Dry Battery (intermittent and continuous), wants re-charging. Rogers, Chemist, Wallasey, Cheshire.

FOR immediate Disposal, on account of ill-health of the proprietor, the two following Patent Medicines some years on the market: "Dr. Wilson's Eczema Cure" and the Rheumatic Remedy Kleptorheum (the Pain Thief), capable of great extension with moderate capital only; neglected through ill-health. Address, "Pharmacy," 20 Fordham Street, Liverpool.

RE Morford, deceased.—The whole of the handsome Mahogany Fixtures and Fittings, together with the Stock and Utensils of a Chemist, to be Sold by private treaty. Apply, Francis Dod & Co., Auctioneers, facing Stoke Newington Railway Station, London.

TENDERS.

CARDIFF UNION.

THE Guardians invite Tenders for Twelve Months' Supply of Drugs and Dressings, etc., for the Cardiff Workhouse Dispensary and Out-door Dispensary, 62 Charles Street, Cardiff. The arrangements for payment of accounts may be obtained from me.

Forms of Tender must be obtained from me, and returned under cover, endorsed "Tender for the Supply of Drugs," so as to reach me not later than Friday, 18th February, 1910.

No Tender necessarily accepted.

ARTHUR J. HARRIS, Clerk.

Union Offices, Queen's Chambers, Cardiff, February 8, 1910.

GREENWICH UNION.

DRUGS, SURGICAL APPLIANCES, AND SURGICAL DRESSINGS.

THE Guardians will meet at the Board Room, Union Workhouse, Greenwich, on Wednesday, March 9, at 2 o'clock p.m., to open TENDERS, viz., for 12 months commencing March 27th, 1910, for Drugs, Surgical Appliances, and Surgical Dressings.

No Tenders can be received other than those for which forms are provided, which can be obtained on application at the Clerk's Office, Union Workhouse; between 10 and 4 o'clock.

The Tenders must be sealed up and endorsed with the name of the Trade on the cover, in the envelope supplied by the Guardians, and delivered at the Clerk's Office, Union Workhouse, before noon on March 9, 1910, after which no Tender can be received. The Guardians do not bind themselves to accept the lowest or any Tender.

The parties tendering need not attend the meeting.

By order,

SAMUEL SAW,

Clerk to the Guardians.

February, 1910.

SALES BY AUCTION.

By Order of the Trustees, under Deeds of Assignments, the remainder of Messrs. Lynch & Co.'s STOCK of Surgical-instruments, including Show-cases, Show-counters, Counter-cases, and Fittings. An immense STOCK of SURGICAL INSTRUMENTS, including Amputation, Minor Operation, Pocket Dressing, Vaccination, Eye, Ear, Nose, Tooth, Mouth, Laryngeal, Tracheotomy, Lithotomy, Ureter, Bladder, Uterine, Vagina, and Ovariectomy Instruments; Catheters, Bougies, Pessaries, Stethoscopes, Sterilisers, Ligatures, Ligature Jars, and Surgeon's Needles Aspirators, Trocars, Antitoxin and Hypodermic Syringes, Thermo Canaries and Anesthesia Apparatus, Davidson's Optometer, Air-cushions, Gauzes, Plasters, Dressings, Trusses, etc., Dispensing-labels, Certificate, books, and Sundry Surgeon's Stationery; also the STOCK of a CHEMIST'S SUNDRIESMAN, Sprays, Brilliantine, Teats, Puffs, Sponge-bags, Rubber Goods, Brushes, Enemas, Bandages, Manicure-sets, etc., together with the Handsome Modern Show-cases and Show-room Fittings, by F. Sage & Co. and other well-known makers; Back Fittings, Counters, Screens, Nests of Drawers, Chairs, Mirrors, Desks, etc.

MR. FRANK G. BOWEN will SELL by AUCTION, at his Rooms, 62A Aldersgate Street, London, E.C., on THURSDAY, February 17, at ONE.

On view day prior. Catalogues of James Mortimer, Esq., Accountant, 37 Queen Victoria Street, E.C., and of the Auctioneer.

TO LET.

CHEMISTS.—Magnificent corner, main road; old-established position; no opposition; finest position round London; rebuilt entirely terra cotta; artistic shopfront; fine residence over; fortune waiting; rent £55; also another at Criklewood Lane, main road; no opposition; £55. Burdwood, 31 York Place, Portman Square, W.

GOOD opening for Chemist; S.E. district; specially suitable for branch or young beginner; includes 2 rooms adjoining shop, and light basement; rental, including rates, taxes, and water, very low. Apply, "S. J." 7 Lee Road, Blackheath, S.E.

SHOP to Let; positively a good opening for a Chemist and Druggist, with no other Chemist in the road or near; also situated in a fast-growing district, where such shop is much needed; address 86 Moyser Road, Streatham. Apply, H. Thorp, 42 Pretoria Road, Streatham.

APPRENTICESHIPS.

WANTED, in high-class Dispensing business in Kensington, well-educated youth as Apprentice; small premium; time for study could be arranged. Apply, "Pharmacist" (73/19), Office of this Paper.

AGENCIES.

INDIA.—Agents, resident, required for Bomhay, Calcutta, Madras, and other centres, to represent Manufacturers of Druggists' Sundries already well-known in India; only those with connections and calling regularly on the Drug-trade entertained. Write, stating full particulars and terms, to 193/22, Office of this Paper.

A GENTLEMAN possessing ability, experience, and a large connection in London and suburbs, desires appointment to Represent a well-established firm in conjunction with an agency for one article he has held for several years; salary or part expenses and commission; highest references. "N. N." (194/12), Office of this Paper.

PARTNERSHIPS.

CATTLE-MEDICINE Traveller with several years' connection, £1,500 to £2,000, requires experienced or Veterinary Chemist, active Partner, or join firm same line; a couple of hundred simply as financial interest of incomer introducing new business, good Preparations or Instruments for Animals. Credentials required with replies to 186/36, Office of this Paper.

PARTNERSHIP, half or one-third share or interest in Wholesale Druggists or Wholesale and Retail Chemical Manufactures or Drysaltery, required by gentleman who is well known to the profession and has had good commercial training. Address "Progress" (189 25), Office of this Paper.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond, prepaid.

RESULTS
OF ADVERTISING IN THIS SUPPLEMENT
LAST WEEK Feb 5 1910

NATURE OF ADVT.	REPLIES
BRANCH MANAGER	40
QUAL. ASSISTT	25
JUNIOR	24
LADY	24
BRANCH MANAGER	23
QUAL. ASSISTT	23

This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of advertisers who use a number or nom de plume.

ANSWER IN TERMS OF THE ADVERTISEMENT AND

REMEMBER you are one of possibly hundreds applying for the same position. Put your case before the advertiser so that he may be able to form a MENTAL PICTURE of your suitability.

BRIEF BUT CLEAR—millions of applications are consigned to the waste-paper basket UNCONSIDERED, because the reader cannot form this picture from the inadequacy of the materials set before him.

REPLIES TO ADVERTISEMENTS may be addressed to this Office and forwarded to the Advertiser for an additional charge of 6d. Trade circulars and samples can in no case be forwarded.

TO SAVE TROUBLE.

ANY correspondents answering advertisements in this Supplement enclose remittances to cover the cost of forwarding their letters to advertisers who prefer to be addressed c/o this Office. The Publisher desires to make it clear that the Advertiser pays postal charges in such cases, and perhaps this reminder will obviate the necessity of the constant return of remittances which forgetfulness of this fact entails.

RETAIL.

BERDEEN.—Wanted, end February, qualified Assistant; accustomed to Store business; Extractor, good window-dresser, and smart essential; good prospects for suitable man. Apply, with particulars as to age, experience, etc., to 190/19, Office of this Paper.

ALDERSHOT.—Wanted, immediately, smart Junior Assistant; interview essential. State full particulars in first application, Allen & Lloyd, Aldershot.

BIRMINGHAM.—Qualified Assistant; able to take charge of Branch; must be gentlemanly in appearance and address, a good Salesman, Dispenser, and Window-dresser; also Junior Assistant. Applicants please send full particulars of age, height, experience, salary required (outdoors), and if convenient enclose photograph, to Hedges & Son, Pharmacists, Dale End, Birmingham.

BIRMINGHAM (near).—Junior Assistant; unqualified; age about 21; Light Retail and Dispensing. State age, height, salary (indoors), Walter E. Wilton, Erdington.

BRISTOL.—Energetic, experienced Assistant; accustomed to brisk Retail; satisfactory references necessary; permanency if suitable; outdoors; hours 8 to 8, Saturdays to 10; no Sunday duty, one evening each week. State age, height, salary, references, and enclose photo, to Managing Director, Hodder & Co., 5 Nelson Street, Bristol.

CULIFTON, BRISTOL.—On February 21, a Junior; about 20; not qualified; indoors. Send full particulars of apprenticeship, height, and salary required, with photo, to Giles Schacht & Co.

ESHER.—Junior Assistant (outdoors) required for good-class business in Surrey; must have good Dispensing experience. Apply, with full particulars and photo, to Chapman, Chemist, Esher. Applications not answered within four days kindly declined.

HONITON.—Qualified Assistant required for a few weeks; easy hours; weekly half-holiday; home comfort. Dyer, Pharmacist, Honiton.

LANCS.—Wanted, young qualified Assistant for March 30 (indoors), for quick Retail business; permanency; must be good worker and obliging countermaid. Apply, stating wages and full particulars, to "Elatrin" (192/29), Office of this Paper.

LONDON, N.—Qualified Assistant for first-class Retail and Dispensing business; outdoors; hours 8.30 A.M. to 8.30 P.M., half-holiday weekly from 2 P.M.; 3 evenings on duty to 10 P.M., alternate Sunday duty 11 A.M. to 1 P.M., and 6 P.M. to 9 P.M.; good salary to capable man. H. L. Douthwaite, Chepstow Mansions, Westbourne Grove, W.

LONDON, W.—Junior Assistant, unqualified (outdoors), for Counter, Dispensing, and Stock; accustomed to Store trade, with a knowledge of Photography. State experience and salary required, 155 Pried Street, Paddington.

LONDON, W.—Wanted (indoors), a Junior, about 21, in a Dispensing and Family business, at once. Apply, Adams, Chemist, 21 Formosa Street, Maida Hill, W.

LONDON Suburb.—Wanted, unqualified Junior, of good appearance and address (outdoors), for Counter and Stock, with a knowledge of Photography. State full particulars, age, experience, reference, and salary required to "Rubie," c/o Messrs. Baiss & Co., Wholesale Druggists, 4 Jewry Street, London, E.C.

LONDON, S.W.—Relief Assistant; want Wednesdays at least from mid-day. State if disengaged other evening if required, give references, other engagements, age, remuneration required, and any other particulars to "G. B." (190/12), Office of this Paper.

LONDON, W.C.—Qualified; gentlemanly; accurate Dispenser and smart Countermaid; one speaking foreign languages preferred. Apply personally between 1 and 6 P.M., or by letter, giving full particulars and enclosing photo, to J. Cofman, 6 Bloomsbury Street, W.C.

LONDON, S.W.—Reliable Assistant wanted; age 23 to 26; accustomed to good-class Dispensing business; personal application preferred. H. J. Perrett, 90 Victoria Street, Westminster.

SITUATIONS OPEN *(continued).*

LONDON, S.E.—Qualified Assistant for a Dispensing, Prescribing, and Extracting Branch business; indoors preferred. Apply to D. U. Still, Old Charlton, S.E., stating single or married, with reference, salary, etc.

MIDLANDS.—Unqualified Manager, with knowledge of Agricultural trade. Prescriber, good Salesman and Window-dresser, for country business. Send photo, references, age, salary required, and details of experience, to "Pharmaco" (189/10), Office of this Paper.

MIDLANDS.—Smart qualified Assistant; indoors; capable of taking charge at branch; must be good Counterman and Dispenser, understanding Photography; half-day weekly. State fullest particulars and salary required to "Pharmacist" (191/23), Office of this Paper.

NORTHAMPTON GENERAL HOSPITAL.

WANTED, Assistant Dispenser (Male); salary 35s. per week. with luncheon: candidates must be qualified Dispensers and competent to undertake the Developing and Printing of x-Ray Photographs.

Applications, stating age and qualifications, to be sent to the undersigned on or before the 18th inst.

C. S. RISBEE.

February 10, 1910.

Secretary-Superintendent.

ON SOUTH COAST.—Manager, qualified, to work up and develop an old-established Pharmacy, mainly Dispensing; must possess undeniable references as to character and ability; a successful man will be given an interest in the business. Apply, giving full particulars, to J. Swaledale, Victoria Avenue, Eastbourne.

ST. LEONARDS-ON-SEA.—Assistant wanted (indoors), for Light Retail and Dispensing. State age, height, references, and salary required, enclosing photo, to T. W. Jones, 55 Bohemia Road, St. Leonards-on-Sea.

SOUTH AFRICA.—Assistants open to accept situations in South Africa should apply by letter to Lennon, Ltd., 54/58 Queen Elizabeth Street, London, S.E., who frequently hear of vacancies.

SOUTHPORT.—Permanency; vacancy for qualified Assistant in first-class Dispensing and Photographic business; outdoors. Apply, giving full particulars and salary required, to "Verax" (182/20), Office of this Paper.

SOUTHSEA.—Wanted, Junior Assistant; must be accustomed to good-class trade and Dispensing; outdoors. Apply, T. A. White, Elm Grove Pharmacy, Southsea.

SURREY.—Wanted, at once, young qualified Manager, energetic and trustworthy, married, to take charge of Branch; must possess undeniable references as to personal character and capabilities; nice house found, newly decorated; every convenience. Please state salary required and references to Totten, Pharmacist, Raynes Park, Surrey.

A. G. CHAMBERLAIN & CO. have a vacancy in their Dispensing Department for a qualified Dispenser; aged 25-30; good experience and address essential; outdoors; four engaged. Please state particulars, salary etc., to Mr. P. G. Chamberlain, 3 Market Place, Rugby.

A COMPETENT Assistant required in a good-class Light Retail and Dispensing business on the South East Coast; must be a reliable Dispenser, a qualified Junior preferred. State salary required, age, experience, etc. (outdoors) (or special indoor arrangement possible), Julian Horrell & Co., Dispensing Chemists, Broadstairs.

CHEMIST-OPTICIAN.—Wanted, immediately, for six months, reliable Chemist-Optician; good Dispenser and Counterman; able to test sight and fit frames while F.S.M.C. taking Minor. Apply, stating qualifications, previous experience, salary expected, copies of references, to "Brighton," c/o Mr. A. E. Grey, 13 Spencer Street, Clerkenwell.

FEMALE Assistant, with Hall qualification; knowledge of Metric System and French essential; applicants must be young and have a commanding appearance. Please state age, salary, and enclose photograph. 75/14, Office of this Paper.

JOHN BARKER & CO., LTD., Kensington, W., require a Counter Assistant: hours 8 to 6.30; 2 o'clock Saturdays; personal application preferred. Apply, R. E. Baron.

JUNIOR Assistant, aged 21 to 24, required at once; short hours. Apply, Mr. Longstaff, John Barnes & Co., Ltd., 191 to 217 Finchley Road, N.W. (opposite Finchley Road Metropolitan Station).

JUNIOR Assistant required for a good-class business in a large town, Midlands; outdoors; no Sunday duty. Please apply, giving full particulars as to experience, etc., 191/18, Office of this Paper.

STICKLAND & CO., Cromwell Place, South Kensington, require a qualified Assistant; 23 or 24; used to high-class Dispensing; indoors; must have good recommendation.

WANTED, for small country town, qualified Assistant; very light duties. "Essex" (195/12), Office of this Paper.

WANTED, at once, good all-round Assistant (outdoors), for a Family Retail and Agricultural business; good Dispenser, Window-dresser, and Counterman; age about 28 years. Apply, 190/10, Office of this Paper.

WANTED, an Assistant; about 23 to 25; qualified, for Dispensing business; London and South Coast experience preferred. State salary (indoors), experience, and full particulars, 190/33, Office of this Paper.

WHOLESALE.

CHINA.—Wanted, a smart, intelligent man, capable of taking entire charge of Aerated-water Factory; aged 24 to 30; must have had first-class experience in all departments of the trade and be capable of managing staff: 4 years' agreement; passage paid out and home. Address, "China," 64 Crutched Friars, E.C.

LONDON, W.—Junior Assistant wanted in Mixed Wholesale and Retail business. Apply to "M." (71/50), Office of this Paper.

ENERGETIC Representative wanted for Mexico and Brazil, to sell British-made Photographic Apparatus and Materials; must have good established connection among buyers of these goods. Reply, with references, to 187/4, Office of this Paper.

JUNIOR Stock Clerk wanted; well-conducted young man; accurate, good writer; preferably with experience of Druggists' Sundries. State experience and wages required to "Stock" c/o C. Mitchell & Co., Ltd., 1 & 2 Snow Hill, Holborn Viaduct, E.C.

PARTNERSHIP.—An exceptional opportunity of entering one of the best-established high-class houses in the trade; capital required not less than £5,000; preference given to an efficient, energetic, qualified gentleman, not more than 35 years of age. Apply, in first instance, by letter, with full particulars and experience, to "H." c/o J. H. Smith, Solicitor, 20 Finsbury Square, E.C.

PHARMACEUTICAL Chemist wanted as Manager of Wholesale Manufacturing Chemist; qualified man with experience in the business. Apply, "Beta" (189/7), Office of this Paper.

TRAVELLER required by a London firm of Wholesale Druggists, for the North of England, to call on Doctors, Veterinary Surgeons; state experience; photograph; salary and expenses. "North," c/o Street's, 30 Cornhill, E.C.

TRAVELLER for Druggist Sundries wanted by London house for Manchester and district; Manchester resident preferred. Apply, 71/43, Office of this Paper.

TRAVELLER required by old-established firm dealing in Pharmaceutical Products; must be resident in Lancashire or Yorkshire; undeniable references. Reply, stating age, previous experience, and salary required, to "Traveller," c/o C. Mitchell & Co., Ltd., 1 & 2 Snow Hill, Holborn Viaduct, London.

WANTED, Office Manager for Wholesale firm of Proprietary Articles (limited company), to control office clerks and travellers; qualification 300 to 500 shares at £1; must be a thoroughly reliable and pushing man, able to introduce high-class Specialities among Medical Men and trade; state age, experience, salary required, and references. Apply to "M. S." (72/15), Office of this Paper.

SITUATIONS WANTED

(Colonial, Indian, and Foreign).

1s. for 12 words or less; **6d.** for every 10 words beyond, prepaid. Replies addressed to this office will be forwarded to the advertiser for an additional charge of **6d.**

This heading is reserved for assistants seeking situations in the British Colonies, India, and Dependencies or elsewhere abroad.

BRUSSELS.—An English Chemist, many years resident in Belgium, desires to Represent good English or American firm either for the Exhibition or otherwise. Write "Chemist," 73 Rue d'Albanie, St. Gilles, Brussels.

BROAD.—Assistant; English; good experience and references; Photography; permanency preferred; unqualified; aged 21. 188/37, Office of this Paper.

ASSISTANT; English; tall; 8 years' experience; disengaged; Continent preferred; highest references. "Aristol" (189/24), Office of this Paper.

CHEMIST (30) seeks Management; disengaged September next; English, South American, and Indian experience; Aerated Waters, Photography, etc.; excellent references. "Gangees" (174/9), Office of this Paper.

SITUATIONS WANTED

1s. for 12 words or less; 6d. for every 10 words beyond, prepaid.

[HOME.] RETAIL.

UNQUALIFIED; 4 years' West-End Dispensing experience; last berth over two years. 189/16, Office of this Paper.

MANAGER or Senior; part-time; Prescriber; Photographic and Dispensing; qualified; aged 35; outdoors; preparing for exam. P. Pettifer, 94 North Street, Leighton Buzzard.

DISENGAGED; qualified; Branch Manager; Senior; outdoors preferred; or Locum work; London and country experience; age 35; tall, smart appearance, energetic; highest references. Pearson, 13 Park Avenue, Chorlton-cum-Hardy, Manchester.

PART-TIME or evenings; London. Buttery, 46 Turnham Green Terrace, Chiswick, W.

UNQUALIFIED; 24; 8 years' experience; references; outdoors. "Statim," 11 Pembroke Avenue, Hove.

QUALIFIED; 25; West-end experience; outdoors; London preferred. Harris, Lisfreda, Troon, Camborne.

LADY Assistant (young) desires situation; 6 years' good all-round experience. Apply, 188/32, Office of this Paper.

IMPROVER; 18½; tall; 3 years' experience; country preferred; indoors. H. W. Larcombe, Selsdon Road, Croydon.

LADY Dispenser desires post; Doctor preferred; small salary. Miss New, 6 Endsleigh Street, W.C. Telephone, City 1934.

SITUATION required; Sundries, Surgical Requisites, Instruments, Drugs. "Assistant," 123 Saltram Crescent, Paddington.

QUALIFIED (Junior) desires engagement in country; thoroughly reliable; free first week March. Apply, 188/35, Office of this Paper.

EXPERIENCED, unqualified Assistant; Counter; height 5 ft. 3½ in.; aged 37; disengaged. J. Ham, 432 Lea Bridge Road, Leyton.

ADVERTISER, smart, young, desires to meet smart, ambitious Dental Mechanic. Write, "Lucrative" (187/34), Office of this Paper.

IMPROVER (20) seeks situation in good-class business; 3½ years' experience; good references; disengaged. Apply, 189/1, Office of this Paper.

MANAGER or Locum; qualified; London district; foreign Pharmacy; Photography, good Counterman and Dispenser. 189/22, Office of this Paper.

UNQUALIFIED; 27; honest, industrious, willing; good window-dresser and counterman; abstainer. "Photography" (189/6), Office of this Paper.

DOCTOR'S Dispensership wanted (London), at once, by a doctor's son; Apothecaries' certificate; quick, accurate, and reliable. "F.", 26 Linden Gardens, W.

YOUNG man, aged 22, wishes to learn Counter work in Chemist's shop, or post as Dispenser; 8 years' references. W. Witty, 15 Palmerston Street, Bedford.

ASSISTANT seeks situation; good experience, references, etc.; not afraid of work; outdoors; used to quick Dispensing business. 189/20, Office of this Paper.

ASSISTANT (23), unqualified, high-class Dispensing experience, desires situation; short hours; City or S.W. preferred; outdoors. "Junior," 25 Mayflower Road, Clapham, S.W.

ASSISTANT (21), Dispenser, desires situation in Retail; 6 years' all-round Wholesale experience; would learn Extracting; moderate salary; excellent references. 187/37, Office of this Paper.

QUALIFIED; 24; London; disengaged 24th. Wilson, 7 Pall Mall East, S.W.

UNQUALIFIED; 23; tall; Dispensing, Counter; good references. Rose, 84 Broad Street, Reading.

LOCUM or temporary; qualified; 31; best-class experience; disengaged. Manning, Fairfield, Glos.

DISENGAGED; qualified; 26; excellent references and experience. 190/21, Office of this Paper.

PART-TIME; Thursday and Saturday afternoons excepted. Walton, 28a Albert Bridge Road, S.W.

SURGEON'S Dispenser and Bookkeeper; experienced. "Dispenser," 206 Victoria Dock Road, Tidal Basin, E.

MANAGER; qualified; married; 29; good experience. Temper-ton, 95 Kennington Park Road, London.

DISPENSER; lady; qualified; experienced; can keep Books. McGregor, "College of Pharmacy," Leeds.

QUALIFIED; Manager; Locum; good experience; disengaged. Bach, Blithfield, Thetford Road, New Malden.

EXPERIENCED, qualified Assistant (26) desires good position in or near London; outdoors. 190/203, Office of this Paper.

UNQUALIFIED; 27; 10 years Dispensing and Photography, Liverpool district. Hall, 80 Park Road, Traumberg, Birkenhead.

MANAGER or Senior; qualified; London or suburbs preferred; outdoors; previous West-end experience. 190/23, Office of this Paper.

JUNIOR (19) in Dispensing business in London or Home Counties; well up in Optics; good references. Moore, 3 Bank Street, Ashford, Kent.

HOSPITAL, Institutions; Locum; Dispenser; reliable; mid-age; experience; Registered Chemist. "M.F.S.," 31 Cambridge Road, Sideup, S.E.

JUNIOR; 20; good all-round experience; excellent references; disengaged March 1. Holbrook, c/o Shackleton, Frogmore Street, Abergavenny.

MANAGER; qualified; age 41; 14 years in own business; Teeth Extractions and Stopping, Optics. "Experientia," 60 Uppingham Road, Leicester.

ASSISTANT, unqualified, would accept moderate salary to get in touch with modern Pharmacy. "X.," 65 Frostom's Road, Workington, Cumberland.

QUALIFIED German Chemist wishes to learn English Dispensing; free 3 evenings weekly; S.W. or W. preferred. "Dispensing," 2 Ovington Street, Chelsea.

JUNIOR; 21; 5½ years' high-class Dispensing experience; disengaged about March 1; West End preferred. Crews, c/o Mr. Senior, Pharmacist, Eastbourne.

LOCUM or Manager, with view to succession; qualified; wide experience, London and country; good references. "Pharmacist," 208 Fawcett Road, Portsmouth.

ASSISTANT (24), unqualified, competent, experienced Dispenser, desires engagement in good-class business; South preferred. Little, 60 Upplingham Road, Leicester.

JUNIOR; 22; unqualified; London Store experience; good all-round knowledge; could manage branch; Photographic. Playfoot, 44 Hollydale Road, Peckham, S.E.

UNQUALIFIED; 25; Manchester or district; splendid testimonials; Part-time five days week, or Doctor's Dispenser full. "Michael," 26 Devonshire Street, Ardwick.

SITUATIONS WANTED (continued).

LOCUM; qualified; disengaged; good references. S. Snoxell, 79 Woodbridge Road, Guildford.

IMPROVER; 20; indoors; 1 year's experience in good Dispensing business. "Placebo," 15 Vine Street, Liverpool.

ASSISTANT; unqualified; 33; first-class Dispensing, etc.; references. Morris, 19 Hotspur Street, Shrewsbury.

DISENGAGED; unqualified; 38; 16 years in London; good varied experience. Fletcher, 95 Church Street, Whithy.

ASSISTANT; unqualified; 32; outdoors; steady; permanency preferred. J. K., 46 St. Peter's Street, Islington, N.

UNQUALIFIED Assistant; 21; good Dispensing experience. H. Friedland, 23 Heywood Street, Cheetham, Manchester.

IMPROVER, 4½ years' experience, seeks situation; London experience; country preferred. Bellamy, Upton, Dideot, Berks.

LOCUM; qualified Pharmacist and Optician; disengaged till end of March; Photography. Clegg, 84 London Road, Reading.

MANAGER or Locum; qualified; first-class London experience; married; disengaged. "W. G.," 9 Barclay Road, Fulham.

LADY Dispenser, Hall certificate, desires post, Doctor or Institution; experienced. "R.," 52 Elgin Avenue, Maida Vale, W.

ASSISTANT; 26; unqualified; 7 years' experience; been accustomed to Stockkeeping. Eccleston, 66 Sumner Road, West Croydon.

ASSISTANT; unqualified; 27; experienced; accustomed quick Cash business; at liberty. "Salol," 25 Western Street, Bedford.

JUNIOR; 20; 5 years' experience; Counter, Window-dressing, Photography; Midlands preferred. W. B., 50 Albion Road, Willenhall.

MANAGER (Senior); West-end, City; qualified; active Counter-man; thorough town experience; disengaged. "Energist," Hadleigh, Essex.

JUNIOR (22) desires more experience in good-class Dispensing; good appearance and references. W. F. Gardner, 1 Park Street, Leamington Spa.

LOCUM; qualified; 33; strict abstainer; trustworthy; open to book engagements for March, April, May, and June. Williams, Elms, Pyle, Glam.

QUALIFIED; 26; experienced; good-class Pharmacy in large provincial town preferred; highest references. A. Sharpley, Fern Bank, Cocker-mouth.

ASSISTANT; 21; experienced in high-class Dispensing, Counter, Photography; tall; abstainer; outdoors preferred. Brown, Ewell Bank, Maltan, Yorks.

QUALIFIED; 22; 5 ft. 8 in.; varied experience, Dispensing and Mixed Retail; good references; South preferred. Russell, The Bridge Pharmacy, Newhaven, Sussex.

JUNIOR; disengaged March 1; tall; varied experience; good Counter-man; Knowledge of Dispensing; City or West End. "Rhei," 3 Lime Tree Walk, Sevenoaks.

WALES.—Permanency or Locum; many years' varied experience; thoroughly trustworthy; disengaged February 14. Jones, Medical Hall, Lampeter, Cardiganshire.

JUNIOR; unqualified; outdoors; London or S.W. suburb; 7 years' Dispensing, Photographic, and Counter experience. Hawker, 14 Moormead Road, St. Margaret's, Middlesex.

UNQUALIFIED, energetic Assistant; good Counter-man and Dispenser; Photography, Window-dressing; highest references; 4 years last situation. Hill, 3 Croft Park, Paignton.

ASSISTANT or Branch Manager; Mixed trade; Prescribing and Extracting; aged 38; not qualified; married; disengaged. Perkins, 172 Clarmont Road, Moss Side, Manchester.

ASSISTANT; 24; married; 8 years' good Dispensing and Retail experience; Photography; good references; disengaged February 20. "Stovaine," 38 Washington Road, Sheffield.

EVENINGS, qualified, after 6 p.m. "W. G.," 25 Gertrude Street, West Brompton, S.W.

LOCUM; qualified; 40; wide experience; moderate terms. G. R. Cook, Chemist, Cleethorpes.

QUALIFIED; 24; West-end experience; London preferred; outdoors. 192/20, Office of this Paper.

LOCUM; qualified; excellent references; disengaged. "Caus," 21a Castletown Road, West Kensington.

MANAGER; progressive, up-to-date; Optics, Photography. "Qualified" (194/5), Office of this Paper.

DISENGAGED; unqualified; several years' experience. R. M. Lelan, 2 Rockville, Hautville, Guernsey.

OUTDOORS; experienced Assistant; unqualified; disengaged. "J.," 129 Russell Avenue, Wood Green, N.

ASSISTANT; Salesman, Window-dresser, Prescriber, and Extractor. "Chemicus," 24 Salisbury Road, Leyton.

MANAGER; experienced; up to date; permanency; London; qualified. "M.," 221, Felsham Road, Putney.

LADY desires post as working Housekeeper; 6 years with Chemists. "N.," 97 Belgrave Road, Ilford.

EXPERIENCED Locum; all branches; day or week; highest references. Briggs, 33 Seaford Road, West Ealing.

MANAGER; married; qualified; excellent experience and references. "Reliable" (190/38), Office of this Paper.

ASSISTANT; unqualified; experienced; highest references; good Dispenser. "D.," 33 Melbourne Road, Ilford, Essex.

ASSISTANT (25), first-class Dispensing experience, seeks City berth; excellent reference. 193/34, Office of this Paper.

QUALIFIED, abstainer, as Manager or Assistant; exceptional experience. "Helium" (193/13), Office of this Paper.

PERMANENCY; qualified Manager; 57; single; active; Prescriber; disengaged. "O. W.," 4 Muscum Street, W.C.

PART-TIME; experienced; highest references; one or two days a week; regular or occasional. "G.," 13 Ingersoll Road, W.

MANAGER or Locum; qualified; all-round experience; London or suburbs; disengaged. "A. M.," 39 Theobalds Road, Leyton, E.

BRIGHTON DISTRICT.—Qualified; whole or part-time; Dispenser to Doctor or Institution. 190/24, Office of this Paper.

LADY Dispenser; qualified; excellent testimonials and experience; Doctor or Institution. "X.," 29 Holmwood Gardens, Brixton Hill.

QUALIFIED man (23) seeks position in good-class establishment where there is Dispensing; disengaged. 190/31, Office of this Paper.

QUALIFIED; 23; high-class London and provincial experience; good references; disengaged shortly. 191/40, Office of this Paper.

REGISTERED desires appointment as Inspector of Branches; no objection to relief duty occasionally. 192/22, Office of this Paper.

ASSISTANT; 23; unqualified; 7 years' high-class Dispensing experience; energetic; outdoors; disengaged February 19. Davies, 56 West Street, Dorking.

QUALIFIED, middle-aged man as Manager; good all-round; energetic, steady habits. Address, "W. A.," 186 St. John Street, Clerkenwell, E.C.

UNQUALIFIED; 37; single; height 6 ft.; first-class experience; disengaged; 2½ years' reference. Michell, 35 Bassein Park Road, Shepherd's Bush, W.

MANAGER or Senior, preferably with view to succession; 28; qualified; single; disengaged February 29; wide experience. 192/17, Office of this Paper.

QUALIFIED (22) desires situation in high-class Pharmacy; Birmingham, Liverpool, or Manchester preferred. Walton, 528 Moseley Road, Birmingham.

ASSISTANT or Manager; unqualified; all-round experience; good references; disengaged. "C., 25 Fleeming Road, Walthamstow.

NO salary; Dentist, Registered Chemist; 45; Management London house and commission. "Prescriber" (194/16), Office of this Paper.

MANAGER; 30; qualified; excellent all-round experience; Counter, Dispensing, Prescribing, Photography; good references; abstainer; disengaged March 12. W. L. Laurence, 48 Main Street, Bulwell.

QUALIFIED Chemist and Surgeon Dentist; single; large all-round experience; good Prescriber, etc.; disengaged. "Manager," 61 Hook Road, Epsom.

ENERGETIC, businesslike Pharmacist seeks situation in good Retail business, with ultimate desire for Partnership, or purchase outright. 193/32, Office of this Paper.

QUALIFIED Chemist is open to position of Manager or Locum; reliable, competent; excellent experience; highly recommended. "N., c/o 11 Mayfield Place, Eastbourne.

MANAGER; experienced; Major; married; abstainer; highest references; reasonable salary for good work; permanency. Address "Apex," 4 Elliott Street, Liverpool.

RELIEF Assistant; disengaged Tuesdays, Thursdays, or Fridays; competent take charge; experienced; all-round, good Dispenser. "B., 6 Station Parade, Horn Lane, Acton, W.

EVENINGS after 5; expert Dispenser, good Counterman; long experience in evening part-time work; highest references; qualified; reliable. "Euclid," 26 Wontner Road, Balham.

MANAGER or Senior; qualified; 33; tall; first-rate all-round experience General, Retail, Dispensing, Prescribing, etc.; disengaged. C. H. Reid, Desford, near Leicester.

ASSISTANT; unqualified; 24; tall, energetic; all-round experience in modern business methods; Dispensing, Photographic; disengaged. "Veronal," 1 Torwood Terrace, Torquay.

TO Chemist-Opticians.—Qualified Pharmacist; 25; experienced; knowledge of Optics, S.M.C., General and Visual; first-class testimonials. "Pharmacist," 58 Wimpole Road, Colchester.

DISPENSING or Retail; whole or part time; considerable varied experience; gentlemanly; trustworthy worker; thoroughly competent; moderate terms "Statim," 275 Waterloo Road, S.E.

QUALIFIED Assistant, best experience, excellent testimonials, 4 languages, desires situation in Liverpool or neighbourhood. "Swiss Chemist," Queen Street Etoile, Waterloo, Liverpool.

UNQUALIFIED (24), trustworthy, abstainer, 7 years' experience, height 5 ft. 8 in., desires permanency; London or near; outdoors; disengaged February 28. Alexander, 32 St. Margaret's Street, Canterbury.

UNQUALIFIED; disengaged; good varied experience; Locum or permanent; 3 years' late reference as Branch Manager; abstainer; middle-aged; single. "Statim," 5 Beaconsfield Cottages, Hillingdon, Middlesex.

USEFUL Man, Porter; all-round knowledge of trade; Photography, Stockkeeper, assist generally; reliable, intelligent worker; well recommended; disengaged. "Phenol," 185A Pelham Street Buildings, Mile End.

FRENCH Assistant (19), with good experience, desires situation in English Pharmacy or institution with the object of perfecting his English. Replies in French to A. Piboyeux, Beaumont du Perigord, Dordogne, France.

CAPABLE Assistant desires change; well up in all branches of Dispensing and General Retail; exceptional references from present employer; over 4 years present berth; aged 30. Address, "Statim" (190/28), Office of this Paper.

QUALIFIED; elderly; healthy and active habits, thoroughly trustworthy and conscientious; good Prescriber and Counterman; varied experience; married, no family; leaving on account of Partner been taken in; well recommended by present firm Branch Manager or Senior; could travel. 191/38, Office of this Paper.

BRANCH Manager or Assistant; Dispensing, Photography, Prescribing; London, Coast, provincial experience; single; abstainer; view succession entertained, or buy cash. "M.P.S.," 195 Kettering Road, Northampton.

BRANCH Manager; married; 35; live on premises or away; town and country experience; Photography, Dispensing, Optics; accurate, reliable, and energetic; disengaged on week's notice; unqualified. Wright, 73 Collier's Water Lane, Thornton Heath.

WHOLESALE.

PACKER (good); Export and General experience; excellent reference. 193/11, Office of this Paper.

TRAVELLER; Lancashire; 12 years' reference; shortly disengaged. 191/14, Office of this Paper.

PERFUMER, experienced, very successful new blends, desires appointment. 193/35, Office of this Paper.

AS Representative; energetic; good appearance and address; first-class experience and references. "City" (188/5), Office of this Paper.

REPRESENTATIVE seeks re-engagement with first-class house; personal connection South Wales and Midlands, Drugs, Sundries, etc. 190/29, Office of this Paper.

QUALIFIED man seeks experience in Wholesale establishment with view to future position and probable investment; small salary to commence. 190/301, Office of this Paper.

ADVERTISER, 10 years' Retail experience, desires berth, City or Wholesale, with view to Travelling; unique experience; undeniable references. 192/23, Office of this Paper.

YOUNG gentleman, experienced all branches the profession, desires position as Representative, any department; highest references; abstainer. "J., 132 Riverdale Road, Plumstead, S.E.

UNQUALIFIED Chemist seeks position with Wholesale firm, where knowledge of Advertising and outdoor publicity would be an advantage; willing to travel. 193/43, Office of this Paper.

QUALIFIED (24), 9 years' very varied Retail experience, tall, good appearance and address, desires post as Representative; first-class references. "Manchester" (189/11), Office of this Paper.

REPRESENTATIVE South Wales and West of England, is open for good Side-lines among Chemists, Perfumers, and others; commission and part-expenses. "Cologne" (177/12), Office of this Paper.

REPRESENTATIVE or Agency; 37; small salary and commission; thorough knowledge of Retail requirements, also Dental; smart appearance and address; tall. "Energetic," 34 Cannon Street, Middlesbrough.

REPRESENTATIVE (33) seeks appointment to Represent good Drug-house solely or otherwise, South Midlands, Eastern Counties, and South to Bournemouth; satisfactory references. 194/22, Office of this Paper.

TRAVELLER of many years' standing requires Representation of first-class house in Perfumery or Speciality at early date; Scotland, Midlands, South; fullest particulars. Reply, "Special" (192/28), Office of this Paper.

REPRESENTATIVE calling upon doctors desires additional Agency, enterprising firm; good Speciality essential; successful interviewer; part expenses with commission. "North Western" (72/45), Office of this Paper.

ANALYTICAL and Consulting Chemist, F.C.S., desires engagement, whole or part time; practical experience Wholesale Drug Trade, General Manufacturing, and Specialities, modern Steam Plant, etc. 193/23, Office of this Paper.

GENTLEMAN, with nearly 20 years' travelling experience, wishes an inside appointment or Management of small Wholesale; very good Retail and Wholesale experience; Sundries, Packed Goods, or Specialities. Guild, 10 New Brown Street, Manchester.

ADVERTISER (34), with sound comprehensive business knowledge and experience, wholesale and retail, seeks responsible position with manufacturing firm or large Retailers; qualified Chemist; accustomed to Pharmaceutical, Agricultural, Horticultural, and General Technical Chemical and Drysaltery business; references to each of 4 employers covering 18 years' service. 191/12, Office of this Paper.

MISCELLANEOUS.

McADAM & TUCKNISS, Sharedealers, Bank Chambers, Blackheath, S.E. Telephone 81 Lee Green.

SHARES FOR SALE (free of commission, subject).—10 Benger's Preference, 118s.; 100 Ordinary, 31s.; 2 Canwal Debentures, £35 each, ex dividend; 260 Idris "A" 6 per cent. Preference, 4s. 4½d.; 62 Meggeson Preference, 82s. 6d.; 120 Parkes Drug Ordinary, 7s. 6d.; 150 Preference, 13s. 6d.; 180 Schweppes Deferred, 7s. 4½d.; 200 A. J. White Ordinary, 2s. 3d.; 150 Preference, 10s. 10½d.

WANTED (subject).—25 Allenbury "B" Preference, 23s.; 80 Bleasdales, 95s.; 20 Evans Lescher Preference, 101s.; 200 G. B. Kent Preference, 17s.; 200 Virol.

List of shares for sale and wanted sent free on application. Bankers, London County and Westminster. Established 1898.

CHEMIST'S high-class Fittings, cleared from 176 High Road, Streatham; only in use 3 years; wall-fitting, 40 ft. long, with drawers under with glass knobs and tablets, with handsome carved pediment and clock in centre, can be divided into 3 sections; chemist-serving counter with plate-glass doors in front, drawers and shelves at back, 22 ft. long; perfumery wallcase, 15 ft. long by 9 ft. high, fitted with plate-glass doors top and bottom; several counter-cases and other fittings; cheap to clear; room wanted. Radin & Co., 384 Old Street, adjoining Shoreditch Town Hall, London. Telephone 5187 Central.

PHILIP JOSEPHS & SONS, LTD., have the largest stock of Fittings, Cases, Counters, etc., etc., in the world; all in excellent condition and ready for immediate dispatch; very low prices to clear. Call and see or write for particulars, stating requirements, to 93 OLD STREET, LONDON, E.C.

WE HAVE WHAT YOU REQUIRE, Drug Fittings, Counters, Wall-cases, Dispensing-screens, Perfume-cases, etc., in almost all sizes; second-hand; condition first-class; prices reasonable. Write for sketches and details giving approximate sizes, or call and inspect RUDDUCK & CO., 262 OLD STREET, E.C.

CHEMISTS' SHOP-FITTINGS (SECOND-HAND). — Ranges mahogany drawers, with bevelled-edge glass labels and cut-glass knobs, shelving above, lockers below; mahogany dispensing-screens, counters with glass-case fronts, wall-cases, bent-front and flat-top counter-cases, counter-desks, tooth-brush cases, complete shop-rounds, etc.; every requisite for chemists; extensive stock to select from at extremely low prices; practical men sent to all parts; illustrated catalogues and estimates free. MATTHEWS, CHEMISTS' FITTER, 14 and 16 MANCHESTER STREET, LIVERPOOL.

Dose Tables for Students of Pharmacy.

A TWENTY-FOUR page booklet showing the adult doses in ordinary cases of the principal medicinal agents, with metric equivalents for dispensing and a complete table of atomic weights, comprising the *L.P.* figures, and the International Committee's latest pronouncements (*O*=16 and *H*=1). The booklet measures 4 in. by 2½ in., and can be carried in the vest pocket. To be obtained from **THE CHEMIST AND DRUGGIST** (Book Department), 42 Cannon Street, London, E.C., for **THREE PENNY STAMPS PER COPY, POST FREE**.

POISONS SCHEDULE, according to the New Act, reprinted from **THE CHEMIST AND DRUGGIST**, with a supplementary list of admixtures, preparations, and other articles brought within the Schedule. On a card (Schedule in front, list at the back) to hang up; price 6d., post free, from the Office of the *C. & D.*, 42 Cannon Street, London, E.C.; or at the published price (4d.) from the leading Wholesale houses.

PLATE-GLASS Shelves, Window-fittings, Carboys, Counters, Drug-fittings, Dispensing-screens, Wall Cases; second-hand; send for list; cheapest house for high-class fittings; complete Chemist fitters; estimates and designs free; men sent to all parts. **TREBLE & CO.**, Shop-front Builders, Ringwood Road, Walthamstow, London.

THE MOST POPULAR DANCE OF THE SEASON FOR CHEMISTS IS THE JUNIOR PHARMACY BALL.

It will take place this year at the

Portman Rooms, Baker St., W., on Wednesday, Feb. 23, 1910. Mortlake Mann's Orchestra. Tickets (including Supper and Light Refreshments), 7s. 6d. each, from the Hon. Secretary, Mr. J. E. Southon, 8 Leadenhall Street, London, E.C., or any of the Stewards.

VACANCIES for Agents in unrepresented districts by the Imperial Accident Insurance Co., Ltd. Estd. 1878. Capital, £100,000. Departments:—Personal Accidents; Employers' Liability for Accidents to Domestic Servants, Clerks and Shop Assistants; Carriage, Motor and Driving Accidents; Burglary and Plate Glass; Horse and Cattle Insurance. Claims paid, £450,000. Liberal terms allowed. Address, Agency Manager, 17 Pall Mall East, London, S.W.

GERMAN Flanged Pill Boxes; manufacturer's stock; No. 0, 2s. 2d.; No. 1, 2s. 5d.; No. 2, 2s. 7d.; No. 3, 2s. 8d.; No. 4, 4s. per gross, subject to being unsold when the order is received; 20-gross lots carriage paid. 70, 4, Office of this Paper.

SEEDS! SEEDS!! SEEDS!!! Chemists, add to your income by selling high-class Seeds direct from the growers; 1d. pictorial a speciality; wholesale catalogue post free. E. W. King & Co., Seed Growers, Coggeshall, Essex.

A.B.C. System of Accounts for Chemists; knowledge of Book-keeping unnecessary; works out gross and net profits, balance-sheet, and income-tax statement with guaranteed certainty; Seventh Edition; does unfailing justice to the man and his business. Particulars and testimonials free, McQueen & Co., Moat Road, E., Leicester.

SEEDS! SEEDS!! SEEDS!!! Important to all Wholesale Buyers of New and Reliable Seeds. Brown's Wholesale List of Vegetable, Flower, and Farm Seeds for 1910 is now ready, post free. Penny Pictorial Packets, our Speciality, 3s. 6d. per 100; 31s. per 1,000. Send for List at once, gratis, and order your seeds fresh from the actual growers. E. P. Brown & Sons, Seed Growers, Coggeshall, Essex.

SUCCESS DURING 1910.—Follow our advice month by month as given in "Business Building," 2s. 6d. yearly (specimen post free); ready-made advertisements for all your Specialities; 2s. 6d. subscription will save you pounds; push your own Proprietary articles; we will tell you the way. B. Whitworth Hird, Ltd., Advertising Specialists, Norwich.

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When you come to think of it, a Pharmacist has much more scope for developing his personality than any other tradesman. A go-ahead Pharmacist believes in his specialities, pushes them, knowing that they pay him well. Do you wish to push yours more—double the sales of them? Send a postcard for a copy of my Booklet "How to Increase your Business," which shows you the way to do so. Post free to Pharmacists only.

J. R. B. ALLISON, Pharmacist and Business Specialist, RETFORD.

I NEVER TELL FAIRY TALES.

If I did I should promise to increase every business to an extent that I knew was impossible. Promises are all very well, but personally I stand or fall by my performances. Every statement made in my free booklet is backed up by references. I get my clients not by what I say but what nearly 800 chemists say about me. They know what I can or cannot do. Apply for booklet to-day and then ask them.

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Exchange Column—Bargains.

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One halfpenny per word with name and address. One penny per word if we register the address and attach a number.
No Advertisement inserted for less than 6d.

FOR DISPOSAL.

BOOKS AND PERIODICALS.

C. & D. Diaries; last 3 years; unsoiled; will exchange for latest Squire or Martindale. 21 Bede Burn Road, Jarrow.

"PHARMACEUTICAL JOURNALS," 1867-1881 (inclusive), neatly bound volumes; 12s. WAKEFIELD, St. Elmo, Dorridge, Birmingham.

FLUCKIGER and Hanbury's "Pharmacographia"; published at £1 1s.; absolutely new condition; post paid 6s. 6d. GAMMIE, Macduff.

PEMBERTON'S "Dispensatory Royal College Physicians," translated into English; 3rd edition; Longman, 1751; what offers? GOODENOUGH, Somersham.

DENTAL.

OVERSTOCKED.—1,000 artificial teeth, mostly twentieth century; also some steel pins and some platinum pins, to clear at 15s. per hundred. 189/21, Office of this Paper.

DRUGS AND CHEMICALS.

2 DOZ. chemist's emulsion, 1s. 3d. size; 1 gross Ozonia, 1s. size; what offers? FLETCHER, 209 Oldfield Road, Salford.

FORMULÆ.

FORMULA for sale; black boot polish. FRANCE, 42 Vartry Road, London, N.

OPTICAL AND PHOTOGRAPHIC.

WHAT offers, 8½ by 6½, 12 by 10, 10 by 8, 2s., 1s. 2d., and 10d. packets Wellington enlarging-papers, in perfect condition; Ozonia. ROBERTSON, Chemist, St. Andrews, N.B.

WHOLE-PLATE outdoor camera, leather bellows, R.R. lens, 3 double backs; roller-blind shutter; good condition: cost about £7; price 52s. 6d. cash. "CHEMIC," 141 St. James's Street, Burnley.

PROPRIETARY ARTICLES.

WHAT offers, 36 Chadwick's balsam, 4 4s. 6d. Soule's hop bitters, 12 Thierry's balsam and ointment, 18 Javal? 191/39, Office of this Paper.

SHARES.

SHARES for sale. See p. 66.

FOR sale, 29 ordinary shares W. B. Fordham & Sons; 20 ordinary shares Barclay & Sons. FARR, Yaxley, Peterborough.

SHOP FITTINGS.

CHECK TILL, nearly new, in good condition; price 18s. SMITH, 3 Belgrave Terrace, Leeds.

WANTED.

QUEEN Sheba gold paint, 1s. size. FLETCHER, 209 Oldfield Road, Salford.

DENTAL chair wanted; must be cheap. BROOKE, 34 Trinity Street, Boston.

OLD artificial teeth bought; cash return post. BROOKE, 34 Trinity Street, Boston.

NEST of drawers, labelled or unlabelled, 3 ft. by 9 to 12 ft. WYATT, Chemist, Mortlake.

NEST drawers, about 4 ft. square; must be cheap. RICHARDS, Chemist, Cadoxton.

TEETH forceps, good and cheap; Squire's, latest edition. J. C. LINGDALE, Boosbeck, Yorks.

CHEMIST'S outside mortar and pestle, lamp. Price and particulars, 187/27, Office of this Paper.

B.P. Codex, also Squire's "Hospital Pharmacopœia." Price to BROOKE, Broadway, Beaconsfield.

RANGE drug-drawers, good condition; shop-rounds, etc. State price, "PHARMACIST," May Cottage, Quorn, Leicestershire.

OPTICAL books; Minor, Major, Chemists' books; send prepaid for valuation; cash offers per return. GOWER, Bookseller, Waterloo, Liverpool.

5-GRAIN pill machine, ointment jars, specic jars, upright show-case, 30 in. by 20 in.; toothbrush stand. Price, condition, MASSEY, Chemist, Bradshawgate, Bolton.

GRINDING mill for seeds and drugs, with fly-wheel for driving with electrical power. State condition, particulars, and lowest price, MAURICE SMITH, Manufacturing Chemist, Kidderminster.

TO BUYERS AND SELLERS.

We take every care to ensure that proprietary and other goods advertised in this column are genuine surplus stock of reputable persons in business, and are compelled to refuse advertisements sent by those who, when occasion requires, decline to satisfy reasonable inquiries as to their *bona-fides*.

We again call the attention of those who use this column for the sale or purchase of goods to the desirability of using our Deposit System. Some forward goods before they receive money for them, and others forward money to advertisers before they have even seen the goods. Disappointment in such circumstances is bound to happen now and then, and it is to prevent this, as well as to check fraud, that our Deposit System was instituted.

The buyer sends us the money for the goods, and when we hear from him that they are satisfactory, and not till then, we hand over the money to the seller. A commission of 6d. is charged by us on any transaction of 3l. or less, and 1s. if above that amount. The commission is payable by the buyer, and should be included in the money sent to us. All Cheques and Postal Orders should be made payable to "Edward Halse," and crossed "Martin's Bank, Ltd."

Coming Events.

This Section of the "C. & D." is reserved for advance notices of meetings or other events which are sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Monday, February 14.

Westminster College of Chemistry and Pharmacy, The Cabins Restaurant, Tothill Street, Westminster, at 8 p.m. Whist-drive. Tickets (2s. each, including refreshments) from Miss Wills, 402 Clapham Road, London, S.W.

Tuesday, February 15.

Nottingham Pharmaceutical Association, Oak Room, Calvert's Café, Long Row, at 9 p.m. Mr. S. Royce, on "Drugs: Their Deterioration and Preservation."

Oldham Pharmaceutical Association, Café Monico, at 6 p.m. Annual dinner, at which Mr. W. S. Glyn-Jones will be present. Tickets (4s. each) from Mr. T. Pickering (Hon. Secretary), 46 Manchester Street.

Wednesday, February 16.

Pharmaceutical Society of Great Britain, North British Branch, 36 York Place, Edinburgh, at 8.30 p.m. Mr. Peter Boa, on "Pharmaceutical Preparations of Sweet Orange"; Mr. E. J. Brown, on "The Preservation of Sulphurous Acid by means of Glycerin"; and Mr. J. Rutherford Hill, on "Pusch's Purity Test for Citric Acid."

Western Pharmacists' Association, Frascati's Restaurant, Oxford Street, London, W., at 9 p.m. Mr. W. J. U. Woolcock, on "Sterilisation."

Sheffield Pharmaceutical and Chemical Society, Council-room of the Literary and Philosophical Society, Church Street, at 9 p.m. Mr. Glass, on "Aromatic Waters."

Derby Chemists' Association, Royal Infirmary, at 5.30 p.m. Inspection of the dispensary and other departments. Mr. Walter Riley is making arrangements for tea.

Three Towns' Association of Pharmacists, Palm Court, Royal Hotel, Plymouth. Whist-drive. Tickets (3s. each) from Mr. S. A. Perkins, Hon. Secretary, Cumberland Street, Devonport.

National Union of Assistant Pharmacists, Liverpool Branch, Y.M.C.A. Large Hall, Mount Pleasant, at 8.30 p.m. Lantern-lecture by Dr. Llewellyn Morgan, on "Summer and Winter Visits to the Lake District."

Thursday, February 17.

Chemical Society, Burlington House, Piccadilly, London, W., at 8.30 p.m. The Julius Thomsen Memorial Lecture, by Sir Edward Thorpe, C.B., F.R.S., and among the papers to be communicated are: "Synthesis of dl-narcotine (Etioposine)," by Dr. W. H. Perkin and Mr. R. Robinson; "Isomeric Chromous Chlorides," by Mr. W. A. Knight and Miss E. M. Rich; "The Chromous Chlorides," by Mr. W. A. Knight.

North Staffordshire Chemists' Association, North Stafford Hotel, Stoke-on-Trent, at 5.30 p.m. Annual dinner. Among those to be present are Sir Edward Evans (Liverpool) and Alderman W. Gowen Cross (Shrewsbury). Tickets (5s. 6d. each) may be had from Mr. Thos. Bentley (Hon. Secretary), Stoke-on-Trent.

Halifax Chemists' Association, Old Cock Hotel, at 6 p.m. Annual dinner. Tickets (3s. 6d. each) from Mr. R. V. Sutcliffe (Hon. Secretary), 64 King Cross, Halifax.

Chemists' Assistants' Association, 73 Newman Street, Oxford Street, London, W., at 9 p.m. Mr. G. T. Gale, on "The Bromoil Printing-process."

Peterborough Association of Pharmacists, Grand Hotel, at 6.30 p.m. Annual dinner, at which the President of the Pharmaceutical Society will be present. Tickets (5s. each) from Mr. H. E. Noble (Hon. Secretary), Midgate Buildings.

Friday, February 18.

Dundee Chemists' Assistants' and Apprentices' Association, Mather's Hotel, at 9.15 p.m. Dr. J. K. Wood, on "The Theory of Solution."

THE BOURNEMOUTH PHARMACEUTICAL ASSOCIATION are holding a *conversazione* at the Gervis Hall Restaurant on February 25. Particulars from Mr. W. A. Bingham, Hon. Secretary.

THE JUNIOR PHARMACY BALL will be held at the Portman Rooms, Baker Street, London, W., on February 25. Tickets (including supper and light refreshments), 7s. 6d. each, from

Mr. J. E. Southon, Hon. Secretary, 8 Leadenhall Street, London, E.C.

A WHIST-DRIVE in connection with the Liverpool Chemists' Association will be held at the Royal Institution, Colquitt Street, on February 24. Tickets (2s. each) from Messrs. A. Steen Barr, 18 Rutland Avenue, Sefton Park, and H. Humphreys Jones, 18 Colquitt Street.

THE ANNUAL DINNER of the students of the Glasgow School of Pharmacy will be held in the Arcade Café, off Argyle Street, on Friday evening, February 25, at 8.30 p.m. Mr. J. P. Gilmour will preside. Tickets (3s. each) may be had from the Secretary of the School, 180 West Regent Street, Glasgow.

THE ANNUAL DINNER of the School of Pharmacy of the Pharmaceutical Society of Great Britain will be held in the Caledonian Room of the Holborn Restaurant, London, W.C., on February 22. Mr. A. E. Hobbs will be in the chair. Tickets (6s. 6d. each) may be had from Messrs. G. A. Donaldson, and A. A. Maitland (Hon. Secretaries of the Dinner Committee), 17 Bloomsbury Square, W.C.

The Week's Poisonings.

SEVENTEEN fatalities, including three misadventures, have been recorded during the week. *Camphor*-poisoning caused the death at Barnton, near Northwich, of Esther Dixon, aged sixteen months, who drank some camphorated oil from a bottle with which she had been playing. A verdict of "accidental death" was returned.—A Bromley carman named Charles Marks poisoned himself by taking *carbolic acid*.—Lump *diacetyl* was responsible for the death by misadventure of Rosina Kate Staley (34), of Buckland, who took it for the purpose of procuring abortion. Her thirteen-year-old daughter deposed at the inquest that "she had been regularly sent by her mother to purchase something from a chemist marked 'Poison,' but her mother broke a piece of the stuff and took it."—A Grimsby fisherman named Henry Hellyer (19) poisoned himself during a fit of melancholia by taking *laudanum*. Two 3-oz. bottles of the drug were found in his bedroom, and it was surmised that deceased had taken about 4½ oz. of laudanum.—Laudanum-poisoning caused the death of Isabella Kane, at Belfast. Suicide during a fit of temporary insanity, said the jury.—A Glasgow lady named Charlotte Lebo took a quantity of laudanum in a Leeds hotel. She died in the hospital four hours afterwards.—Rosina Darby (16), domestic servant, poisoned herself at Edgbaston by taking *oxalic acid*.—A lovers' quarrel led to another servant, named Laura Pamment (25), ending her life at Wanstead with the same acid.—An open verdict was returned at the inquest upon Leon Buchanan (60), who ended his life at an hotel in Aldgate, London, E.C., by taking *potassium cyanide*.—Henry H. Sadding, assistant master at the Newmarket Workhouse, committed suicide by means of the same lethal agent. Deceased had been chagrined at not securing a better Poor-law appointment which he had applied for.—At Redditch, Harry George Betts also took cyanide of potassium with suicidal intent. A foreman electroplater at the B.S.A. Works had given deceased some cyanide "to case-harden some tools."—At the resumed inquiry at Kenilworth into the death of Mr. Ernest James Beckett (41), chemist and druggist, a verdict of suicide while temporarily insane was returned (*C. & D.*, January 22, p. 98). Dr. Bostock Hill, county analyst, said he found conclusive evidence of the presence of *prussic acid* in the stomach-contents. The quantity present was sufficient to cause death.—Hydrocyanic acid was also used for suicidal purposes by John Atkinson Duncan, an ex-soldier, at Ash. Deceased purchased 1 oz. of Scheel's prussic acid from Mr. Ernest Litchfield, chemist and druggist, Lynchford Road, Farnborough, on January 5, in order to destroy three dogs. Mr. Litchfield had known deceased, who signed the poison-register, for over ten years.—Sydney Smith died in the Frome Hospital as a result of drinking a quantity of *spirit of salt* for suicidal purposes. Deceased suffered from asthma.—Spirit of salt was also used for self-destruction by Frank W. Augarde (49), musician, at Forest Gate, London, E.—A Wigan widow named Mary Moran died in consequence of taking a dose of a mixture containing an excessive amount of *strychnine*, in consequence of an error in dispensing (p. 240).—At Battersea on February 10, Mr. Troutbeck held an inquest in regard to the death of Ernest Spencer (22) from *chloroform*-poisoning. James D. Walker, assistant at Parke's Drug Stores, Lavender Hill, S.W., was the principal witness, and stated that for a year the deceased had bought methylated chloroform for cleaning clothes. During the past month he had bought three 1-lb. bottles. The legal conditions were observed, nevertheless the Coroner questioned the witness severely, and the jury returned a verdict of accidental death from an overdose of chloroform.